

PACK RATS'

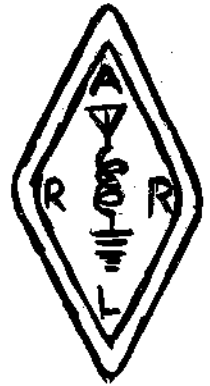


PACK RATS

CLUB CALL: W3CCX

MT. AIRY VHF RADIO CLUB, INC.

CHEESE BITS



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

AFFILIATED CLUB: AMERICAN RADIO RELAY LEAGUE

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

VOLUME IV

FEBRUARY 1970

NUMBER 2

OUR PREZ SEZ

Happiness is An Additional Section

The Big Binge known as the VHF-SS is now history. But who will forget the excitement of it. The feelings encountered. Well, there was anticipation, satisfaction, panic, frustration. Each completed log page was a victory. A new section was ecstasy. I guess we're all unwinding emotionally. Who said there is no drama left in ham radio?

What makes a guy look forward to the next SS? Certainly not the band conditions, the QRM, the bad signals, the lousy operators, all of the hard work. Could it be the club honor, the prestige, the competition? Maybe. I think it's more basic. The desire to accomplish and to improve ones own station. The satisfaction of a new project or antenna working out.

Out of the backwash, what did we learn? I've got my list of improvements. What are you changing? Everybody has either a rig, a converter, receiver, an antenna or rotator that needs some kind of work. Let's talk about it, exchange experiences and ideas and help each other.

W3KKN, Ernie Kenas

Wanted! Ghost operator for the next VHF-SS.

DEADLINE FOR ARTICLES IS THE GENERAL MEMBERSHIP MEETING.

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8533 ALGON AVENUE
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#5 SUNNYBROOK COURT
STRATFORD, N. J. 08084

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

MONDAY NIGHT NETS:

145.2 - 7:30 P.M.
50.2 - 8:30 P.M.
221.4 - 9:30 P.M.
432.3 - 10:00 P.M.

OFFICERS - 1969-1970:

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W3CXU, JOHN ALLEN
K3MXM, LEE COHEN
K3CIV, RALPH HERSH
(Ex-Officio)

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

10¢ per copy \$1.00 per year

We operate on an exchange basis with other publications and anything that is printed in CHEESE BITS may be reprinted, unless so stated, as long as the proper credit is given.

* * * * *

MEMBERSHIP

Resigned

W3OZP, William Miller
7639 Loretta Avenue
Philadelphia, Pa. 19111

Retired

K3WEU, Paul R. Behrmann
5101 Wynnfield Avenue
Philadelphia, Pa. 19131

Applied for Membership (Student)

WA3NFV, Dan Mitten
997 Holland Road
Holland, Pa. 18966
355-5269

New Addresses

K3ZCY, Edward R. Barbacow
10 Chartiers Avenue
Pittsburgh, Pa. 15205

WA2KOI, Lloyd R. Schoenig
207 Woodlawn Avenue
Collings Lake, N. J. 08094

* * * * *

WHAZZIT ITEM #1

We can anticipate its growth. Lead time to increase its size and value is substantial. We will attempt to pay for its growth this month. The treasury will not suffer.

A REPORT ON THE 1970 V.H.F. SWEEPSTAKES

January 10 and 11 is now history. The Pack Rats went through the anguish of pre-contest nerves and though their numbers were down this year, performed in an admirable fashion.

Some of our mainstays were missing - W3HKZ, it was understood, dashed off on a vacation in the southland; K3BPP went off on a prearranged skiing safari in Switzerland; W3SMK was sick in bed with the flu. Oh yes, King three Norway Mexico Norway was sorely missed by the writer.

Sixty-seven logs were submitted, adding up to a total of approximately 550,000 points. One of these logs was for 220 MC. operation mobile by K3JJZ. We can always tell when El's six meter gear has been stolen from his car.

Crying towel stories were plentiful. The wind and snow storms during Xmas week raised havoc with a number of antenna systems. The "crying towel" and a 5894 was won by K3IGX, Dick Boyle, at the regular meeting on January 21.

Activity seemed to be down on all bands. Poor operating procedures were at a minimum. Most AM signals were materially improved - overmod was a rarity in our area. However, with the upswing in operations of SSB on six meters with some attendant increases in power resulted in spurious problems that all but wiped out rare section contacts for many of the gang. The greatest inequity existed in the grand silence of the 100 KHZ CW portion of the six meter band. The "chopping" effect of CW in the next 25 to 50 KHZ played hobb with the phone signals. We should go after the FCC for a slice of 25 HKZ or so in the first 100 HKZ adjacent to 50.1 MHZ for Tech operators. (ARRL please take note!)

Ground wave, some sporadic E and bits of scatter were some of the propagation phenomena observed. Sideband and CW paid off again for section multipliers. W3CXU worked VE3CWT on 2 meter CW - W2AXU, WA3CAG and K3IPM worked K9HMB in Illinois on six meter SSB - WA5RMS in Mississippi as well as WA4OSR in Georgia were worked by Stan, K3IPM. Ex-Pack Rat Tom Jones (exW3OHY), W4HDD, made it up here from West Florida to contact father and son, W3MFY and WA3CAG respectively.

Recap of High Scorers (Preliminary Count)

W3MFY	-	48,664	WB2SZK	-	12,276
K3IPM	-	46,320	K3JJZ	-	11,968
WA3CAG	-	39,360	K3GAS	-	10,944
W3ZD	-	25,448	K3UJD	-	10,878
W3KKN	-	22,776	K3EOD	-	10,710
W2EIF	-	21,580	W3SAO	-	10,064
K3IUV	-	20,000	W3CCX	-	10,064
W3CL	-	16,412	W3CJU	-	9,648
W2AXU	-	15,196	W3GEW	-	9,632
W3HFY	-	13,200	WA3EPS	-	9,600

ALL IN ALL - A JOB WELL DONE. CONGRATULATIONS FELLOWS!

W3CL, Harry

FROM THE BOOK RACK
Paul R. Behrmann, K3WEU/AREA

TAPE RECORDING FOR FUN AND PROFIT (Tab Books #497) by Walter G. Salm
224 Pages, Over 200 Illustrations, 21 Chapters - \$7.95 Hardbound
\$4.95 Paperbound

An up-to-date guidebook for tape recording enthusiasts - professional and amateur - on equipment and techniques. Tells how to get the most out of tape recorders, and what to look for when buying a new one. Written for both hobbyists and beginners as well as for those well up in the ranks of the professionals, this profusely illustrated guide tells how recorders work and what to look for in a recorder (including foreign makes). It contains a searching analysis of various microphones for a wide range of applications, and also covers wireless microphones, remote controls, mixing and switching circuits, recording from a telephone, reverberations, editing, recording film sound tracks, etc. It contains chapters on video tape recording, eavesdropping devices, and tape duplication. Also included are instructions for integrating recorders with other equipment such as stereo systems, plus schematics for various amplifier and switching applications.

Contents: How Tape Recorders Work, Tape Formats, Choosing a Tape Recorder, Microphone Basics, Getting the Most From Your Mic, Wireless Microphones, Battery-Operated Recorders, Remote Controls and Voxs, Amplifiers and Preamps, Mic Mixers, Switching Adds Versatility, Plugs, Jacks and Cables, Integration with Stereo System, Recording From Telephone, Maintaining Tapes and Recorders, Foreign Recorders and the Future, How Tapes are Duplicated, Film Sound Tracks, Video Tape Recording, The Snoopers Around Us.

WHY NOT ANOTHER BAND
K3GAS, Doc Cutler

Now that the January contest is over, why not make an effort to get on another band. What band you say. Why not the Pack Rat intercom band - 220. Do you know that more than 35 contacts could have been made on 220?

432 is another band coming into its own among the Pack Rats. K3UJD, Mario, did a tremendous job in coordinating a 432 converter project. Information is available from him for anyone interested. More than 10 contacts on this band was easy during the last contest.

1296 will be commanding more interest this year. WB2IOE, Lou, is on regularly. K3IUV, Bert, has his dish antenna up and made a contact this last contest. K3GAS, Doc, has the equipment but his homebrew antenna isn't brewing any signals as yet.

One of the most interesting projects for the future is ATV. This band will operate on 439.25 mhz and should be a challenge for those already on 432. K3ZKO, Ron, has been on regularly and is the person to see for information.

There must be more people with equipment around that is waiting to be converted. Why not call on our technical committee to give you a hand. CU on 220 and 432.

73, Doc

PROPER-NAME ANTENNAS
de W3HKZ, Ed Kushner

Adcock: An antiphased pair of vertical receiving dipoles (or monopoles) for direction finding. Crossed pairs are commonly used with a goniometer.

Alford: Resonant square-loop antenna formed by four linear sides with their ends bent inwards to provide capacitive loading which equalizes the current round the loop.

Bellini-Tosi: Direction finding antenna consisting of two vertical orthogonal triangular loops with their bases over ground, used with goniometer.

Beverage: Low-height, long-wire receiving antenna over ground, having the receiver at one end, and a terminating resistor at the other end, which is nearer the remote transmitter.

Bruce: Original name of "Rhombic" end-fire antenna, which consists of a diamond shaped arrangement of four wires with the feed line at one vertex and a resistive termination at the opposite vertex of the longer diagonal of the rhombus. The first published U.S. description was given by Bruce in 1931. Bruce's name is also given to a series-fed array of vertically polarized, resonant rectangular loops (or half-loops over ground) each one-quarter-wave wide and one-half-wave spaced, the array having a castellated appearance.

Butler: Array antenna with feed system incorporating hybrid junctions to obtain a plurality of independent beams.

morton d. mazer WA3EPS
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TU 6-0108

TWO METER FM OPERATION

De LERC Bulletin

When a ham is just getting started on 2-meter FM he discovers that different operating practices are used. However, there is a strong tendency to slip back into the old phrases and wordy transmissions that are still used on 2 meter AM operation. It is hard to remember that 146.82 MHz and 146.94 MHz are monitored channels because just one station (or no station) may be heard in operation. The apparent lack of activity does not mean the channel is wide open and available for tests or long transmissions. One must remember that the whole local two meter FM world is listening when he hits that microphone button. Operating courtesy is necessary and natural on two meter FM! One must follow a few self-imposed rules (within the FCC rules) to provide operating room for everyone, including:

(1) Listen before transmitting

Even if you just hear a distant base station working a mobile, there is a chance that you will clobber the mobile's signal at that base.

(2) Keep transmissions short

Avoid long monologues and useless phrases. A few seconds should suffice for each transmission in this push - to - talk operation.

(3) Identification

Give call letters of your station and the station(s) you are working just at the start of the first transmission and at the end of the last one. As long as each intervening transmission is less than three minutes long, one just has to identify the stations every ten minutes during a series of these short transmissions.

(4) Calling

Don't call CQ; a simple statement that " W3HKZ is listening 9/4 " suffices. Anyone who wants to speak with you will respond. Remember that many are monitoring but most won't want to become involved in any QSO because they are listening while they are doing other work.

(5) Breaking In

Don't yell " Break - Break ". If it is necessary to bust into a QSO use the name of the person you want while he is listening. (FM operators have names, not handles.) Simply call "Ed" if you want to tell him something. If Ed hears you call his name, he will say "go ahead, breaker". Then you give his call followed by yours but nothing else. Wait for his further acknowledgement before transmitting anything else.

Two Meter FM Operation
Continued

(6) Testing

Do not test on a busy channel such as 146.82 MHz or 146.94 MHz. Test into a dummy load or a less - busy channel. If you must test using your antenna, particularly avoid 146.34 MHz because you never know what you may be keying up.

(7) Private Channel

If any group with a special interest such as a club net, ect., wants, it is good to pick a "private channel", using equipment which can operate on two or more channels. If desired they can call on "94" and then shift to their "private channel" to handle traffic, ect. It is necessary to check with all other FM groups in the area before selecting the frequency of the "private channel" and to do some careful listening and operating on the desired frequency before a final decision is made to purchase crystals for the group.

(8) Uses

FM has been fun and (more important) it has served as a very useful tool for many individuals, teams and special groups. FM operation seems a natural for short range club communications during hamfests, QSO Partys, field days, ect.

via X-MITTER, Penn Wireless Assn.

AN UNUSUAL OPPORTUNITY FOR HIGH SCHOOL STUDENTS

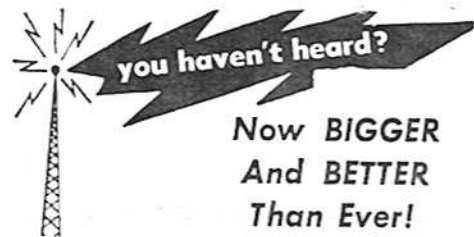
by Larry Schoen, WA2GUA

Probably the most interesting six weeks of my life were spent this summer at a cluster of buildings on top of a mountain in central Connecticut. Its name is the Talcott Mountain Science Center for Student Involvement, and its purpose is explained by its name.

Every summer, the National Science Foundation, a Government Agency, sponsors Student Science Training Programs at various institutions throughout the country. These SSTP's are designed to acquaint the high ability high school student with one of many different of science in an effort to provide the country in the future with many able scientists.

In looking through the National Science Foundation's literature pertaining to these programs; I found that one would give me an opportunity beyond belief.

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TUES. WED.

SAT. 9 AM TIL 6 PM



AN UNUSUAL OPPORTUNITY FOR HIGH SCHOOL STUDENTS CONTINUED

If it wasn't the Techtronix 535 that impressed me, then it must of been the twenty foot parabolic dish... or maybe the PDP - 8 computer. I made an application and after a lot of hoping, I received a long distance call that told me I would be spending the summer doing original research in radio - electronics.

If my point has not yet been clearly made; let me state it frankly. Any high school student interested in science, and having sufficient ability should not pass up this chance. The fields of concentration of these programs range from Astronomy, Physics and Structural Chemistry to Microbiology, Ecology and Field Archaeology. If you are a high school student (most programs prefer Juniors), I strongly suggest you write to:

OPERATIONS UNIT
OFFICE OF ASSOCIATE DIRECTOR
(EDUCATION)
NATIONAL SCIENCE FOUNDATION
WASHINGTON D.C. 20550

and request the Directory - Science Training Programs for High Ability Secondary Students - Summer 1970. After looking through the booklet, I am sure you will find one program that facinates you as it did me.

via High - Q Flatbush Radio Club

DIRECTOR SUGGESTS PUBLIC SCHOOLS TEACH CODE.....

At the Annual 1968 meeting of the Officals and Directors, Phillip P. Spenser, W5DLH, Director of Delta Division had some recomendations for consideration for the ARRL to review. One of his proposals were:

The ARRL should take steps to have an " Introduction to Amateur Radio" course adopted into the curriculum of high schools throughout the United States and Canada...

via X - MITTER Penn Wireless Assn.

MT. AIRY VHF RADIO CLUB INC.

SUMMARY OF CONTEST SCORES

JANUARY 10-11, 1970 VHF SS

Call	Contacts	Sec	Score	Call	Contacts	Sec	Score
K3AA	29	2	696	WB2IOE	79	6	2528
K3AGR	155	4	4340	K3IPM	774	20	46440
W3AJF	244	6	7808	K3IUV	406	15	20300
W2AXU	262	19	15196	K3JJZ	352	7	11968
WA3BIV	151	13	6496	K3JJZ/M	14	1	308 (220 Mc.)
K3BOY	162	4	4536	WA3JSR	91	2	2184
W3BRU	80	3	2080	W3KKN	438	16	22776
WA3BRV	42	2	1008	K3KMN/3	101	6	3232
W3CL	#373	12	16412	K3KTY	227	6	7232
WA3CAG	602	21	37324	W3KXH	161	4	4508
W3CCX*	297	7	10098	WA3LNH	53	2	1272
W3CJU	285	8	10260	W3MFY	755	22	48320
WA3CND	215	4	6020	K3MSV	33	2	792
W3CXU	71	11	2961	W3MVF	215	10	8600
K3DLS	107	3	2782	K3MOM	246	4	6880
W2EIF	415	16	21580	WA3NLT	170	5	5100
K3EOD	315	7	10710	W3NSI	152	5	4560
K3EPB	146	3	3796	WB2OAD	141	12	6204
WA3EPS	300	6	9600	K3OBY	200	3	5200
WA3ERQ	229	3	5954	W3PST/3	108	3	2808
WA3FAA	159	5	4770	W3SAO	296	7	10064
W3FGQ	56	2	1344	WB2SZK	341	9	12958
WA3FOF	100	5	3000	K3UJD	259	11	10878
K3GAS	288	9	10944	K3WEU	8	2	192
W3GEW	300	6	9600	K3WGJ	56	2	1344
WA3GNV	36	4	1008	K3WCK	56	2	1344
K3GOJ	190	4	5320	W3WLI	70	2	1680
W3HK	215	10	8600	W3YXU/3	107	3	2782
W3HPY	330	10	13200	W3ZD	#472	17	25488
WA3HIT	211	4	5908	K3ZKO	80	3	2080
K3HSS	171	6	5472	K3ZPQ	135	7	4590
W3HYO	80	4	2240	W3ZRR	107	2	2568
K3IGX	215	5	6435				
WA3IMT	127	4	3556				
				TOTAL			558,234

* Club Call

67 Logs
64 Members

SWAP SHOP

Conducted By: W3ZRR, Ray Whitehead
7329 Shelborne St.
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- Gonset 903A, 500 watt, 2 meter linear - hardly used. Good as new including manual with 4 dow key relays. Capable of AM, FM, and SSB. 10 watts required for exciter. \$150

CONTACT: K3MZA, Ken Stillman
12608 Knights Road
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215 - NE 7-1777

FOR SALE

- Heathkit HX30 6 meter SSB transmitter. \$110
- SBE-33 80 to 15 meter SSB transmitter with vox adapter. \$170
- 6 meter linear amplifier PR 4CX250 B w/P.S. \$200
- Set 80-15 meter Webster mobile whips 2 resonators. \$30

WANTED

- General Coverage Receiver
CONTACT: WA3BIV, Carl Barish
8760 Stenton Avenue
Philadelphia, Pa. 19118
215 - CH 7-1071

FOR SALE

- SX101A Receiver
- HT-37 Transmitter
CONTACT: K3WEU, Paul R. Behrmann
5101 Wynnefield Avenue
Philadelphia, Pa. 19131
215 - 877-0562

DID YOU KNOW

At the last meeting the following old timers showed up:

- K3DWC, Phil Delano
- W3BRU, Frank Benner
- K3ACR, Rich Pattison
- W3CLT, Doc Sharpe

WA3FOF, Ralph, is now an emergency coordinator in the AREC.

At the last meeting we were pleased to greet the following visitors:

- WA3NFV - Dan, Holland, Pa.
- WA2FVU - Dave, Cherry Hill, N.J.
- WA3MRP - Ed, Mt. Airy, Pa.
- WA3HGX - Vince, Flourtown, Pa.

WA3JSR, Ben Ginsburg, has passed his advanced class license.

K3JJZ, ye old editor, and XYL Lorraine proudly announce the birth of Holli Beth who timed her arrival perfectly (one week before the contest and two days before the end of the year).

MEETING NOTICES

The next DIRECTORS' MEETING will be held on Wednesday, February 11, at the QTH of W3CXU, John Allen, 1119 Highland Avenue, Abington, Pa. Please call 886-4109 if you are unable to attend.

The next REGULAR MEETING will be held on Wednesday, February 18, at the West Oak Lane Jewish Community Center, Sedgewick and Thouron Streets, Philadelphia. Topic - Home Brew Night. Please call W3CXU, John Allen, if you are going to bring something.

VIA HARK BULLETIN

Heard of Hams on the Band:

- Solid copy here, OM. What was the handle again?
- If I don't hear you on 50.48 I'll give you a call on the landline.
- You send me a QSL and then I'll have your address and send you one.
- Sorry you aren't able to copy me any more. How about a sked tomorrow at this same time?
- Naw! This....thing....never..... drifts.
- If you hear me on, give me a shout. I'm not usually on this band, though
- Got a line noise this morning; someone must be running a faulty TV set.
- The novice who made two errors sending his own call. (Would you believe a General doing the same thing?)

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PACK RATS

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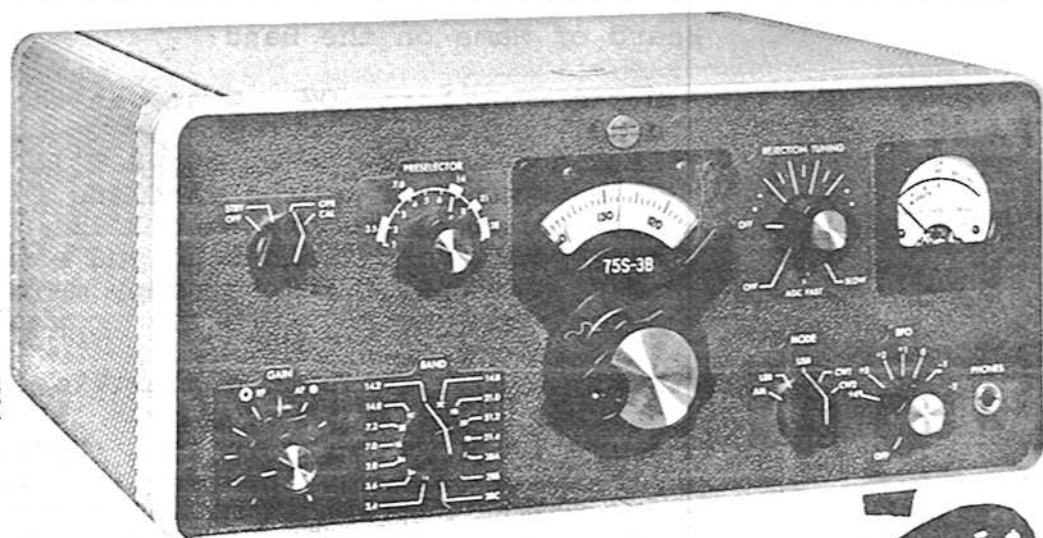
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