

PACK RATS'



PACK RATS

CLUB CALL: W3CCX

CHEESE BITS



MT. AIRY VHF RADIO CLUB, INC.

MT. AIRY V.H.F., RADIO CLUB, INC., PHILA., PA.
(50.2, 145.2, 221.4, 432.03 & 1296.3 Mc)

ARNS

AFFILIATED CLUB: AMERICAN RADIO RELAY LEAGUE

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

VOLUME XV

FEBRUARY, 1973

NUMBER 2

THE PREZ SEZ

Greetings! The Contest is over for another year and I am sure all had a good time. The "Crying Towel" meeting was a blast. I want to thank Harry, WA3NGK and his able bodied committee for doing such a good job. I am sure the club did real well with a score of over 550,000 points. So as not to let the Contest spirit run dry, we will again participate in the June QSO Party with K1SFF/3, Tony as the Chairman. Let's all do our part and help to win this year. As noted by some careful observers: This column mentioned that we were third instead of second in the 1972 event. SORRY! Some other noteworthy details are top single operators: K1SFF/3 and W2EIF in their respective sections in the September QSO Party.

Let's not forget Home Brew Night - Maybe there will be some simple F.M. circuits.

73,

K3BPP, Walt

FROM ARNS BULLETIN OF MAY, 1972

"Contests are a terrible irritant to those who are not participants, and find the frequencies they like to use cluttered with stations piled up on each other exchanging contest reports. But we will have to admit one thing: A contest is the acid test of equipment performance and operator ability to get the most out of the station over an extended period."

From Reflected and Directed, by George Goldstone, W8AP

* * *

MAKE THIS NOTE ON YOUR CALANDER: THE APRIL GENERAL MEETING WILL BE THE 4TH WEDNESDAY - APRIL 25TH INSTEAD OF THE THIRD WEDNESDAY!

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.

* * * * *

DEADLINE FOR ARTICLES IS THE GENERAL MEMBERSHIP MEETING.

Swap Shop Items - No Charge

EDITOR:

W3CL, Harry B. Stein
2087 Parkdale Avenue
Glenside, Pa. 19038
215 - TU 7-5052

PUBLISHER AND SUBSCRIPTION MANAGER:

K3GAS, Doc Cutler
7815 New Second Street
Elkins Park, Pa. 19117
215 - ME 5-1078

PRINTER:

K3ZKO, Ron Cohen
6629 North 5th Street
Philadelphia, Pa. 19126
215 - 224-3036

TRUSTEE OF CLUB CALL: W3CCX

W3SAO, Francis Brick
821 W. Lindley Avenue
Philadelphia, Pa. 19141
215 - DA 4-7524

AWARDS CHAIRMAN:

W2EIF, Joseph Kilgore
#5 Sunnybrook Court
Stratford, New Jersey

OFFICERS: 1972-1973

PRESIDENT: K3BPP, Walt Bohlman
VICE.PRES.: W3FQD, Dick Huntzinger
TREASURER: K3GAS, Doc Cutler
CORRES.SEC.: W3SAO, Francis Brick
REC.SEC.: WA3BIV, Carl Barish

DIRECTORS:

W3CJU, Don Hampton
WA3AXV, Ron Whitsel
WA3NGK, Harry Brown
K1SFF/3, Tony Souza
K3ZSG, Bill Murphy
K3CIV, Ralph Hersh
(Ex-Officio)

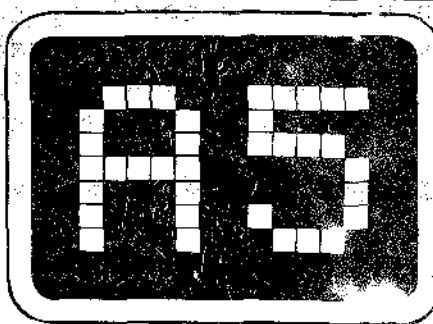
DIRECTORS' MEETINGS ARE HELD ON THE SECOND WEDNESDAY OF EACH MONTH AT DESIGNATED LOCATIONS.

MONDAY NIGHT NETS: NET CONTROL

145.2 - 7:30 P.M. W2EIF
50.2 - 8:30 P.M. W3CL/W3GEW
221.4 - 9:00 P.M. K3GAS
432.03 - 9:30 P.M. K3IUV
1296.3 - 10:00 P.M. K1SFF/3

FRIDAY NIGHT NET: NET CONTROL

439.250 ATV NET - K3ZKO/WA3AXV
19:00 Hrs.



**AMATEUR TELEVISION
MAGAZINE**

Fast and Slow Scan

**SUBSCRIBE: \$2.50 a year for
six issues of ATV facts.**

P.O.Box 6512, Phila, Penna. 19 38

CALENDAR OF COMING EVENTS

Syllabus by Lee, K3MXM

FEBRUARY

- 3 - 4 Space Net Contest Sponsored by WB2MTU, Tony
A good contest to enter and deserves the full Pack Rat Support.
- 11 Lancaster, Pa. Hamfest. Details on Nets.
- 14 Board of Directors Meeting, QTH *W3KKN*
- 21 General Club Meeting - West Oak Lane Jewish Community Center
Thouron and Sedgwick Streets, Philadelphia, Pa. 8:00 P.M.
HOME BREW PROJECTS - Here is your chance to show to your
peers what you have been doing and can do with a soldering
iron and some baling wire. Suitable prizes for each category.

Open Meeting to all Pack Rats and their friends.
Silent Auction and Mario's Raffle.
Refreshments will be served.

Moonbounce Committee Get-Together. Plans are being formulated
and projects are getting under way. Come on out and join this
newest club program. Help is needed in planning, construction
and "figuring things out".

Coming Events

MAY 5TH Ladies Nite - Buck Hotel, Feasterville.

Remember, One-seventh of your life is wasted on Mondays

* * * * *

A WORD FROM THE JUNE V.H.F. QSO PARTY CHAIRMAN

TONY, K1SFF/3

At the January General Meeting, perhaps you saw the ARRL Section Award the club won as a result of our participation in last June's V.H.F. Contest. Maybe you didn't know that we placed second overall less than 10% below the leader. This could be our year. Reserve June 9th and 10th to join your friends in Hilltown, Pa. in another fine effort. First June Contest meeting for all interested parties is set for 8:00 P.M. February 7, 1973, at the QTH of Doc, K3GAS. Volunteers are needed to supply trucks and station wagons to haul all the contest gear up to Hilltown and back. See you at Doc's!

Editors Note: Talking about awards -- El, K3JJZ won a red "Crying Towel" at the January Meeting for a heart rending story! The Towel was beautifully sewn by Rose, the XYL of the SS Chairman, Harry, WA3NGK.

VHF REPORT
BY JO, W2EIF

Another contest has come and gone. Conditions were pretty much as they have been in the past. Some lousy signals on the air and a lot of over-modulation, flat topping, and even oscillating rigs! One CW rig on two meters had such a bad signal that I couldn't even find the frequency he was operating on. Noisy conditions prevailed but it was compensated a little by a nice opening on Sunday afternoon which netted quite a few sections for those on six. Western Mass. was not worked from here for the second year in a row and did not work New Hampshire for the first time in years. Activity was down on six meters, but up on 144/145. The upper bands were not too well populated during the contest as usual. However, I can't complain since I bettered last years effort. Band conditions to the West have been good all fall with W8DGF and R8III in Ohio coming through regularly. The big news is that Carl, W2AZL was able to work W6PO in California via moonbounce on 144 in Mid-January. Carl uses a quad of 11 element cushcraft antennas and a KW. The California station also uses a KW and a tiltable array of Colinear beams. Carl reports that the signals were very similar to the quality received via Tropo from Ohio.

* * * * *

TID BITS

- The Philadelphia County ARPSC hopes to participate in the city's emergency Drill on May 4th. Those operators who would like to help should contact Paul, WA3HIT at 722-4411.

- Our best wishes to Tony, WB2MTU, who escaped with minor injuries from that recent airplane accident at O'Hare Field in Chicago.
- Congrats also on the tremendous showing on the reborn Space Net on Friday evening Jan. 5th on 50.2 MHZ. We understand Tony forgot and was calling CQ Space Net at 3:00 a.m. Sunday during the recent VHF SS.
- WA3FOF, Ralph, received his ARRL Public Service Certificate at a presentation at the club's Jan. 17th Meeting. The certificate was in recognition of his work during the Hurricane Agnes disaster (Nov. 1972 QST)
- Our apologies to Steve, WA3PIR, whose call was left off the Pack-Rats list of stations. Steve ran up a beautiful score during the Jan. VHF SS (14,092)
- Sgt. Harry F. Brick, Jr., op of W3SAO was married Dec. 24, 1972, to Doris Krill of Quakake, Pa. The wedding took place in a little white church in Barnesville, Pa. The reception was held at the bride's mother's QTH. Harry and Doris are now residing in Millington, Tenn.
- Those of you desiring to raise your license or have harmonics or youngsters desiring to learn amateur radio, there are two courses starting at the Franklin Institute, Grades 7 to 12, Sat. Mornings 10 am to 12:30p.m. Irvin Lusky, Scott Paper Co., instructor. At the Springfield Adult School Intermediate and Advanced, Monday Eveings 7:30 p.m. to 10:00 p.m. a chance to advance your grade of license. Instructor from Mobile Sixers Radio Club.
- W3CL on membership: New application: K3HIN, Richard Albert, 11219 Halstead Street, Phila., Pa. 19116, Sponsors, K3JJZ and WA3BIV.

FROM THE SCM EPA

"Pack Rat", a respected name in VHF circles. Why? Well, the Club, The Mt. Airy VHF ARC, which is made up of "Pack Rats" has an active loyal membership and when they set a target they mean business. They don't always obtain their high goals, but almost!

Now the Club got enough members to join ARRL so the Club could be affiliated with ARRL. This should have been the first step to getting all members to join ARRL and obtain league VHF appointments. Somehow this target has never been reached.

So why not join ARRL. It's not perfect, but unless we join and support it, we might not have anyone defending us. Further, you can do something to correct league errors by being an active voting member. Appointments are available to league members. You as an ARRL member can obtain a VHF certificate, if you are interested you can be an OO, or an ORS or OPS. There is no cost to you and you get on ARRL's mailing list for all the latest news. One requirement, try to remember to mail a report card to the SCM each month.

Let's work on the non ARRL members and then get the members to request appointments. You get a nice piece of wallpaper for each appointment.

73,

George, W3HK

WA3RCA STATION ACTIVITIES
CHRISTMAS WEEK

The day before Christmas, a phone call was received from Paul Rilling, WA3HIT, AREC Director from Philadelphia requesting assistance for relaying long haul traffic from the patients at Abington Memorial Hospital. Each year a six meter station is set up at the hospital with local messages passing through the local civil defense VHF network and long haul and foreign traffic being relayed through NTS or MARS. Last year about sixty (60) Christmas greetings and get well messages were handled, about half being local and half long haul. This year we were surprised at being requested to handle the long haul traffic through our Club station--- WA3RCA. It seems as if the station that handled it last year was not available and few of the VHF stations have the HF facilities to immediately relay to NTS. This year therefore, we agreed to take time off from our usual Christmas day activities and man the club station from 10:00 A.M. till 2:00 P.M.

Shortly, after checking in with WA3MXM/3 at the hospital, it became apparent that nearly all of the messages were long haul which meant that they would have to be received by our six (6) meter station and then relayed later to NTS either directly or through an intermediary. By eleven AM with about 27 of our 30 messages being long haul, I called for a break and phoned W3INW (ECARS Officer) and WA3QQO for assistance. Bob very nicely arranged a sched

WA3RCA STATION ACTIVITIES CHRISTMAS WEEK CONTINUED

with WA3QOZ, the local NTS traffic handler for 1:15 p.m. at 3850 on 75 meters. By that time, Joe had arrived and while he was furiously copying the final thirty messages, I passed most of the traffic to QOZ, from the Lt band shack while Joe worked the six meter link with the hospital. A total of ninety (90) incoming messages were received and written up on ARRL radiograms. Most were dispatched within a few minutes to an hour of receipt.

Looking back; the messages handling exercise appears to have been very worthwhile, with much experience gained all around, not to mention the boost to the spirits of the patients at the hospital. This is the first time that a really large volume of message traffic was successfully handled here excellent practice for the S.E.T. on the last weekend of the month. Separation of the operating facilities into a separate VHF and HF shack with a third room wired and ready to go, make emergency use or high volume message handling a distinct pleasure for a multi-op station such as PENNARC. Please note that third party restrictions apply also to ARRL radiograms and we made the error of accepting several messages for foreign countries which do not accept third party traffic; NTS would not accept these and neither should we have accepted them.

Pete, WA3OVH, Trustee

NEW PRODUCTS OF INTEREST TO HAMS

BY LYN, W3NSI

1. Ten-Tec Model 315 Receiver

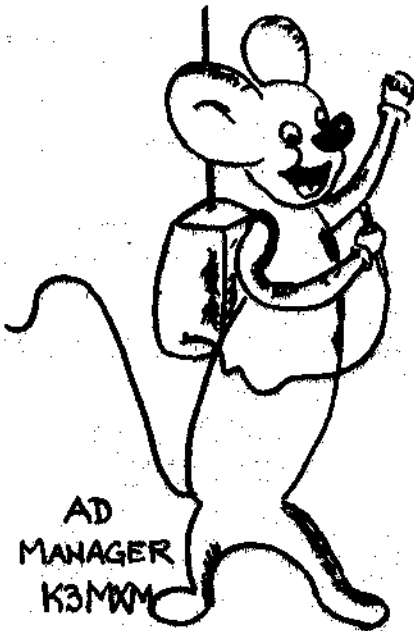
The new #315 receiver covers the amateur bands between 10 and 80 meters and has many interesting features. It is all solid state, and uses permeability tuning with a calibrated slide rule dial. The tuning knob also has calibration settings on the skirt with approximately 25 Kc per revolution. A 100 Kc calibrator is built in, along with a 25 db attenuator to cut the received signals, making the check points more noticeable. A single conversion circuit is used with a 9 Mc crystal lattice filter, with an optional 300 Cy CW filter available. Most of the circuits are built onto 5 plug-in boards. Price \$229. Ten-Tec, Sevierville, Tenn. 37862.

2. Swan Transmitter/ Receiver Units

The Swan Company has introduced three T/R units with input powers as follows: SS-15, 15 watts. SS-100, 100 watts, and SS-200, 200 watts. All units are about the same size 12 1/2 wide, 6 high and depth from 10 1/4 to 12, depending on power. You can see there is little advantage from the standpoint of space used, however, the power drain on receive is only 1/2 amp and averages 6 amp on transmit with the highest power unit. No transmitter tuning is required, as all circuits are broadbanded. A crystal cal. and noise blanker are built into the receiver section. Price \$579, 699, 779 for the 3 models. Swan Electronics, 305 Airport Road, Oceanside, California 92054.

MT. AIRY V.H.F. RADIO CLUB, INC.

RAT ADS

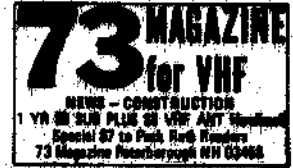


AD
MANAGER
K3MM

**ham
radio** the most interesting
amateur magazine:

1 Year \$6.00, 3 Years \$12.00

HAM RADIO MAGAZINE
Greenville, N. H. 03048



(215) TU7-9032

W3CL

HARRY E. STEIN ASSOCIATES
COMMUNICATIONS CONSULTANTS

HARRY E. STEIN

2097 PARKDALE AVE.
GLENRIDE, PA. 19038



AMERICAN RADIO RELAY LEAGUE, Inc.
HARRY A. McCONAGHY, W3SW/W3EPC
DIRECTOR, ATLANTIC DIVISION, ARRL

"Connie Mac"

NE 7-8329

GEORGE S. VAN DYKE, JR., P.E.
CONSULTING ENGINEER

W3HK

4807 CONVENT LANE
PHILA., PA. 19114

* * * * *

SWAP SHOP

FOR SALE:

KWM - 2 - Super Mint Condition
\$625.00 cash, no trades. Also,
looking to buy 312B-4 or 312B-5.
CONTACT: Marty Shapiro, WA3IFQ
TU 7 - 1232

FOR SALE:

4 Element 6 meter Telerex Antenna.
Modified sixer with crystal socket
already externally mounted outside
cabinet with three extra crystals.
12 volt mobile power supply. \$35.00
or best offer.
CONTACT: Joseph Calder
6351 Oakland St.
Phila., Pa.
PI 4-9292

FOR SALE:

6 meter Saturn Halo with matching
transformer and coaxial cable
completely assembled ready to use.
Had a one to one SWR with Communi-
cator III. Includes bumper mount
bracket, and ant. coil spring.
Special fender coax mount for
PL259 connector. (Original cost
\$8.00)
Shakespear mobile 6 meter whip
with loading coil. Power inverter
(Workmore, Sarasota, Fla.) Converts
DC to operate AC unit - 125 watts
intermittent - 100 watts constant.
CONTACT: Herm, K3GOZ for reasonable
deal. HO 4-6555



215 885-2140

JEROME R. GOMBERG
MANAGER

LAFAYETTE RADIO ELECTRONICS
of Cheltenham, Inc.

9126 OGONTZ AVENUE WYNCOTE, PA. 19099



ELECTRONIC CENTER
SCHLUMBERGER PRODUCTS CORP.
OVER 300 ELECTRONIC KITS

TED HALDIS
MANAGER
K3EPK

6816 ROOSEVELT BLVD.
PHILA., PA. 19149

TELEPHONE
215 CU 8-0180



215 263-3304

BILL HAUSE
MANAGER

LAFAYETTE RADIO ELECTRONICS
Corp. of King of Prussia
KING OF PRUSSIA PLAZA KING OF PRUSSIA, PA. 1940

(609) 931-3020

HALLICRAFTERS
FACTORY AUTHORIZED
SERVICE

BUS. (215) MI 6-2511
RES. (215) 277-5883

TURNER 6-0399

WA3KNM



PAR ELECTRONICS

STEREO, HAM, CB, TEST EQUIP., TV'S
NEW & USED BOUGHT & SOLD
COMPLETE REPAIR SERVICE - FCC LICENSED

ELECTRONIC EXCHANGE

ALL TYPES OF HAM GEAR & ELECTRONIC EQUIPMENT
BOUGHT, SOLD, TRADED & REPAIRED

Karpati Electronics

ELECTRONIC INSTRUMENTS
REPAIR & CALIBRATION

PETE
WB2NRU

300 W. KINGS HWY.
MT. EPHRAIM, N. J. 08059

new & used antennas

GORDON R. KITTEL
K3AIG

311 E. WALNUT ST.
(N. WALES RD.)
NORTH WALES, PA. 19454

N. B. S.
TRACEABILITY

2138 PARKDALE AVE.
GLENSIDE, PA. 19038

OLDFIELD 9-4440



AMIL S. GUMULA
PRESIDENT

Vince Barr, WA3ICS

Suburba: (215) 449-2300
Phila. (215) 528-6120



RESCO ELECTRONICS
Radio Electric Service Co. of Pa.

DISTRIBUTORS OF ELECTRONIC EQUIPMENT

A. G. RADIO PARTS CO.
939 TOWNSHIP LINE RD.
ELKINS PARK, PENNA. 19117
TELEPHONE: 215 - 856-5100

KASS ELECTRONICS DISTRIBUTORS



DISTRIBUTORS OF
RADIO - TELEVISION PRODUCTS
INDUSTRIAL ELECTRONIC PARTS & EQUIPMENT

EUGENE CASTROVILLO
MANAGER

29 YORK ROAD
WILLOW GROVE, PA. 19090

RCM Authorized
Distributor

2502 TOWNSHIP LINE ROAD
(West of Lansdowne Avenue)
DREXEL HILL, PA. 19026

BARRACKS
TRADING POST

Camping • Electronics • Canvas
ROUTE 38 at RUDDEROW AVENUE
MAPLE SHADE, NEW JERSEY 08052
HARVEY PRIMOST 662-6114

(609) 663-9236

SWEETMAN CALIBRATION SERVICES
ELECTRONIC TEST EQUIPMENT CALIBRATION

GERHARD J. SWEETMAN

2672 GLADWYN ROAD
PENNSAUKEN, N. J. 08109



Scott's
Surplus
Electronics

134 E. Park Av. Merchantville, N.J. 08107
Division Of dab Associates Inc.

Pres: Scott Layman

609 - 665-2466

TOWER SERVICE

K3MIM

JE 3-4660
4661

JACK HASSLER CO.
STEEPLEJACKS
1619 W. THOMPSON ST.
PHILA., PA. 19121

LEE A. COHEN

WIRING RABB
POLISHING CLOTHS
COTTON & WOOLLEN WASTE

CLAYTON L. HUBY & SON
INCORPORATED
4527-31 HEDGE STREET
PHILADELPHIA, PA. 19124

WORLD'S LARGEST RECORD AND AUDIO DEALER

Paul J. Rilling, WA3HIT
Record Salesman

SAM GOODY
ROOSEVELT

ROOSEVELT MALL, N. E.
ROOSEVELT BLVD. & COTTMAN AVE.
PHILADELPHIA, PA. 19149
(215) 336-9777 - B-7
336-9780

W3AJF
HORACE P. DEACON
MAINTENANCE CONTRACTS

(215) FO 5-3808

LOcust 7-7130

W3CJU

K3RTY



W3KKN

DONALD KRAUT HAMPTON

Jeweler - Watchmaker

TRANSPORT EQUIPMENT COMPANY

"Everything for the Truck"

ERNEST KENAS
TOOL DESIGN
MANUFACTURING ENGINEERING DEPARTMENT

ROGER W. KRAUT
31 W. State Street
Doylestown, Penna.

Phone
Bus. 348-4884
Res. 348-8969

JOHN A. TATE
PRESIDENT

2215 - 2217 RACE STREET
PHILADELPHIA, PA. 19103

THE BUDD COMPANY
AUTOMOTIVE DIVISION

PHILADELPHIA, PA.

THE AMERICAN RADIO RELAY LEAGUE, INC.

ADMINISTRATIVE HEADQUARTERS NEWINGTON, CONNECTICUT, U. S. A. 06111

~~QST~~
OFFICIAL ORGAN

January 22, 1973

A R R L B O A R D M E E T I N G H I G H L I G H T S

ARRL OBS: If transmission of this bulletin runs over ten minutes, don't forget to identify. Make extra transmissions if you can, because of the importance of this information. Thanks -- 73. WINJM

OFFICIAL BULLETIN NR 410 FROM ARRL HEADQUARTERS
NEWINGTON CONN JAN 19 1973 TO ALL RADIO AMATEURS BT

THE BOARD OF DIRECTORS OF THE AMERICAN RADIO RELAY LEAGUE MET IN HARTFORD, CONN., JANUARY 18 AND 19 FOR TWO DAYS OF INTENSIVE EVALUATION OF AMATEUR RADIO MATTERS IN GENERAL AND LEAGUE AFFAIRS IN PARTICULAR. A MAJOR ACTION WAS THE UNANIMOUS ADOPTION OF A RESOLUTION EXPRESSING DEEP CONCERN OVER THE APPARENT TREND TOWARD RESTRICTIVE REGULATIONS CHARACTERISTIC OF RECENT FCC ACTIONS. DIRECTORS REPORTED STRONGLY ADVERSE MEMBERSHIP REACTION TO CHANGES IN AMATEUR RULES, ESPECIALLY IN THE AREAS OF REPEATER OPERATION, MESSAGE TRAFFIC HANDLING, AND PHONE BAND SUBALLOCATIONS. THE BOARD DIRECTED LEAGUE OFFICERS TO UNDERTAKE A VIGOROUS PROGRAM TO SEEK REASONABLE PHILOSOPHIES OF REGULATION AND INTERPRETATIONS, CONFERRING AS NECESSARY WITH APPROPRIATE GOVERNMENT AGENCIES FOR THE PURPOSE OF ASSURING THE CONTINUED AVAILABILITY OF TRADITIONAL LATITUDES AND FREEDOMS AND THE FULL PUBLIC SERVICE CAPABILITIES ESSENTIAL FOR THE WELFARE OF THE AMATEUR RADIO SERVICE. LOOKING SOME YEARS AHEAD, THE BOARD ASSIGNED TO THE NEW INTERNATIONAL AFFAIRS COMMITTEE THE TASK OF UPDATING AND FORMULATING MORE DETAILED PLANS FOR REPRESENTATION OF AMATEUR RADIO AT AN EVENTUAL HIGH FREQUENCY WORLD RADIO ALLOCATIONS CONFERENCE. THE BOARD CHOSE AMSAT TO RECEIVE THE TECHNICAL MERIT AWARD, PARALLELING A SIMILAR ACTION TO PROJECT OSCAR SEVERAL YEARS AGO. ADMINISTRATIVE SUPPORT WAS AGAIN VOTED FOR AMSAT, WITH ARRL ASSUMING RESPONSIBILITY FOR EDUCATIONAL, PUBLIC RELATIONS AND INTERNATIONAL PROMOTIONAL ASPECTS OF AMATEUR SPACE COMMUNICATION. STUDY WILL BE MADE OF A SPACE TRACKING STATION INSTALLATION AT LEAGUE HEADQUARTERS. AN EVALUATION OF AMATEUR PERFORMANCE IN PROVIDING EMERGENCY COMMUNICATIONS DURING RECENT DISASTERS PROMPTED THE FORMATION OF AN EMERGENCY COMMUNICATIONS ADVISORY COMMITTEE. ITS TASK IS A STUDY OF FREQUENCY PLANS, AS WELL AS DUTY ASSIGNMENTS AT HEADQUARTERS, SEEKING IMPROVED EMERGENCY COMMUNICATIONS CAPABILITIES. THE RESPONSIBILITIES OF SECTION COMMUNICATIONS MANAGERS WERE EXPANDED TO INCLUDE VOLUNTARY ACTIVITY IN THE AREAS OF PUBLIC RELATIONS, CLUBS, RECRUITMENT AND TRAINING. THE BOARD APPROVED SPECIFIC GOALS AND OBJECTIVES SUBMITTED BY THE PRESIDENT AND BY THE GENERAL MANAGER. IT REELECTED THE PRESENT DIRECTORS ON THE EXECUTIVE COMMITTEE, MSSRS CLARK, EATON, GRIGGS AND THURSTON. THE BOARD ADDITIONALLY DIRECTED A STUDY OF THE LEAGUE ORGANIZATIONAL STRUCTURE, INCLUDING DUTIES AND RESPONSIBILITIES OF THE PRESIDENT. MINUTES OF THE MEETING WILL APPEAR IN MARCH QST. AR

- BA -

PHILADELPHIA AREA REPEATER ASSOCIATION

In December 1970, the Les Voyageurs and the Main Line VHF Association merged to become what is now known as the Philadelphia Area Repeater Association (PARA). Present membership totals nearly 100 members.

One of the reasons for the merger was to unify 2 meter FM operation in the Philadelphia area and to help prevent frequency misuse and interference; a dilemma which already existed in many large metropolitan areas.

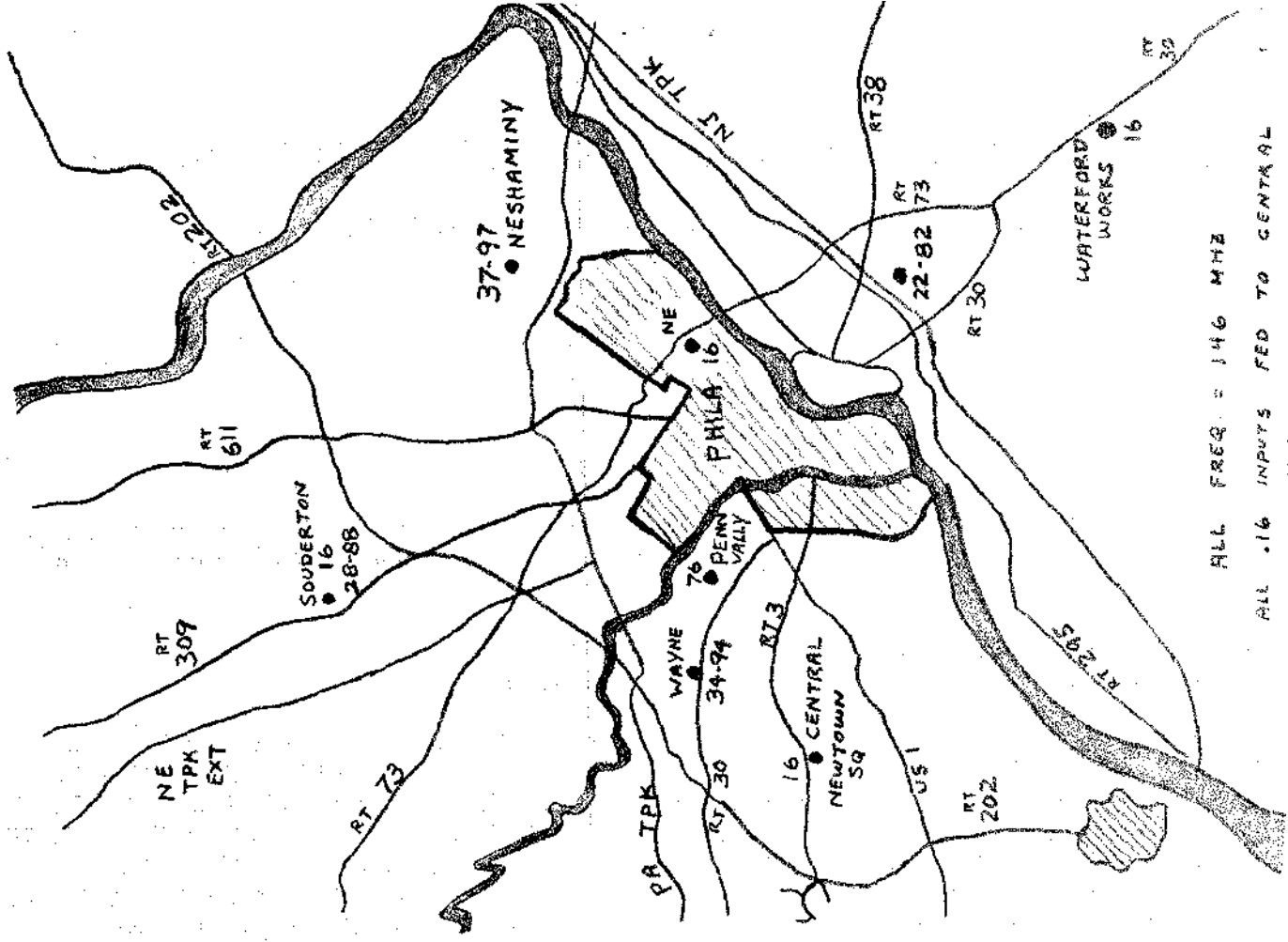
The PARA officers for 1973 are:
President - K3JPB, Bill Winter
Vice President - W3GJC, Bill Cusick
Treasurer - WA3GAA, John Chapman
Rec. Secretary - WA3TEM, Marsha Stein
Corres. Sec. - WA3MDP, Dick Teasdale

The directors for 1973 are:

NW quadrant - W3DYQ, Al; W3CQC, Tom
NE " - K3ZPH, Sam; K3ZFD, John
SE " - K2QIJ, George; W2BHK, Joe
SW " - W3VN, Alan; K3ECV, Dick

Anyone desiring further information concerning the repeater organization may contact any of the above directors.

P.A.R.A.



ALL FREQ = 146 MHZ

ALL .16 INPUTS FED TO CENTRAL TO
VIA 450 MHZ LINKS - CENTRAL TO
#76 XATR VIA 450 MHZ LINK

THE SURPRISING MOON

For as long as man has been on this planet, he has gazed at the varying luminous shapes of the moon with intense curiosity, aware almost from the beginning that this heavenly body was linked somehow with his own destiny. For several hundred years man struggles to magnify the power of his eyes to study the surface of the moon in an attempt to discern something of its true nature. Finally, in July, 1969, man solved this problem by successfully transporting his own eyeballs to the lunar surface and beginning the genuine exploration of that body. Along with himself, man brought an ingenious array of scientific instrumentation to the moon, capable of measuring various physical phenomena and transmitting data back across a quarter million miles. In the two years since man fulfilled his age-old longing to go to the moon, he has learned some strange and wondrous things. The moon proved full of surprises.

Very few of the pre-Apollo theories about the moon have survived. The vision of a cold, dead planet has given way to an amazing variety of geological activity detected and measured by the Apollo instrumentation. Perhaps the most astonishing and interesting discovery is the possibility that water exists in sizable quantities in some form below the lunar surface. There is enough evidence pointing in this direction to merit an experiment aboard Apollo 17 to probe for confirmation.

Two Rice University scientists, Dr. John Freeman and Dr. H.K. Hills are "80 per cent certain" that water vapors are issuing through cracks in the lunar surface during periods of frequent small moonquakes.

Confirmation of the existence of significant quantities of water or ice below the lunar surface would add a completely new dimension to the scope of lunar exploration. But there have been many other surprising discoveries on the nature of the moon since Apollo 11. Far from being dead, the moon has considerable seismic activity in moonquakes of regular frequency and of a type that does not occur on earth. Heat has also been detected toward the core of the moon estimated as high as 800F. The moon has a greater magnetic field than estimated. It is a mineral storehouse of tremendous magnitude with some elements in combinations rarely or never found on earth.

Beneath its surface are both a rubble or honeycomb type of structure and massive concentrations of solid material. There is growing evidence that the moon at one time had volcanic activity and there are gases other than water vapor that vent to the surface during periods of large moonquakes. These may account for the orange coloration observed for more than 150 years by earthbound astronomers.

All of these major surprises have resulted from the first four manned explorations of the moon. In addition there is a sizable accumulation of other scientific data to be refined from the instrumentation still functioning on the moon and the nearly 400 lb. of lunar rocks and soil samples returned by the four Apollo crews. The moon has already proved to be a scientific bonanza regardless of what more material benefits may be realized eventually.

(CONTINUED)

THE SURPRISING MOON CONTINUED

With the bountiful scientific harvest of Apollo 15 and the opportunity to fly scientist-astronauts on Apollo 17 and beyond, the scientific community now finds itself running out of Apollo missions. Apollo 18, 19 and 20 have been scrapped to save money, despite the fact, now obvious, that they would offer the maximum opportunity for scientific lunar exploration.

It is no longer the same old moon smiling down on us that it was before Apollo. It is a moon that is full of surprises. Having piqued his own curiosity with the initial discoveries there, it is certain that man can never again ignore its lure.

A.W. (Tony) Slapkowski, WB2MTU
Director, VHF SPACE NET

50TH ANNIVERSARY N.R.L. (S.G.)*
MOONBOUNCE LISTENING TEST ONLY
(SUBMITTED BY JO KILGORE, W2EIF)

There will be weekend listening periods during March and April, 1973. The geometry has been chosen for minimum interference to S.G. operations.

Three bands on frequencies 1296.000, 432.000 and 144.050 MHz will be used for sequential periods. The part concerning the East Coast is broken out as follows:

DATE	TIME PERIOD GMT	FREQ. MHZ	GHA ^o	DECLIN. ^o
March 31	1030 - 1100	1296.000	7 ^o	7 ^o S
April 1	1230 - 1300	432.000 & 144.050	23 ^o	1.5 ^o S
April 7	1930 - 2000	1296.000	45 ^o	25 ^o N
April 8	2030 - 2100	432.000 & 144.050	45 ^o	25 ^o N

Transmit the following format over and over for the 30 minute period at a speed of 10 W.P.M. "NRL NRL TEST TEST DE (Your Call Twice)"

* S.G. Means Sugar Grove (W.Va.) receiving site.

SWAP SHOP CONTINUED

FOR SALE: Westinghouse 2 mtr. FM	\$25	RCA CMV 3 110v ac.	52.525	\$75
General Radio 805Sig Gen.	20	Hallicrafters HT 32B		\$285
Linear Amp. pr. 813 w/supply	75	National HRO 60T w/coils		175
U44BET 450 FM mobile w/acc	50	Heath HO-10 scope		50
BC 342 Rcvr 110 v. ad.	20	Fisher 220T Hi Fi rcvr/amp		150
Motorola 80D T+R Hi band	25	AR22 Rotator & control		15
Misc. parts and cabinet	10	MCA151 6FM base 2 freq. w/ xtals		125
Above from Estate of W3AJQ. See C.R.				
Spencer, W3QQH, 884-8469				

MT. AIRY VHF RADIO CLUB, INC.
SUMMARY OF CONTEST SCORES
JANUARY 6-7, 1973 VHF SS

<u>CALL</u>	<u>CONTACTS</u>	<u>SEC.</u>	<u>SCORE</u>	<u>CALL</u>	<u>CONTACTS</u>	<u>SEC.</u>	<u>SCORE</u>
W3AJF	150	117	6300	W3HFX	182	10	7280
W3AQA	204	4	5698	W3HIT	192	3	4992
W2AXU	106	22	6784	W3HK	229	13	10534
W3AXV	419	20	25140	W2HVD	125	10	5000
K3BOY	129	5	3870	W3JIDQ	175	4	4900
K3BPP	129	10	11600	K3IGX	193	4	5404
W3BRU	119	4	3332	W3IMT	73	3	1898
W3CCX *	195	3	3510	K3IPM	582	27	43068
W3CL	333	11	13986	K3IUV	353	18	19740
W3CJU	248	6	7936	K3JJE	314	7	10676
W3CXU	54	8	1944	W3JSR	94	3	2444
W3DJF	211	3	5473	W3KKN	403	23	26598
K3DLS/3	115	3	2990	K3KMN	285	18	15960
K3DMA	257	6	8224	W3KOI \$	188	24	12750
W3DNC/3	302	16	15704	K3KTY	186	11	7812
W2EIF	411	22	26304	W3LNH/3 \$	304	20	18210
W3ELX	230	6	7360	K3MKM	240	6	7680
K3EOD	263	15	19150	W3NGK	311	11	13062
K3EPB	177	3	4602	K3NMN	181	5	5430
W3EFS	201	5	6030	W3NSI	140	4	3920
W3FGQ	180	4	5012	K3OBY	135	3	3510
W3FOF	241	9	9158	W3OVH	188	8	6768
W3FQD	180	9	6840	W3PIR	270	16	14040
K3GAS	286	9	10868	W3PST/3	84	4	2352
W3GEW	211	5	6330	K1SEF/3	272	14	13056
W2GGB	41	2	984	W3SZK/2	98	3	2548
K3GOZ	135	3	3510	W3TMY	145	4	4060
K3GOJ	228	18	12768	K3UJD	126	5	3780
K3GOJ/3	26	2	624	K3VEQ	60	3	1560
				W3ZD	424	21	26280
				K3ZSG	379	21	23405

TOTAL = 564756

60 Logs Submitted
 59 Members Participating
 40 Logs Over 5,000 Points

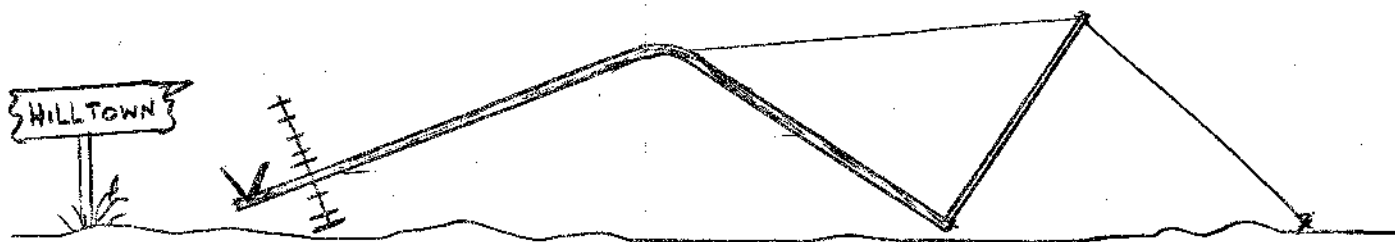
* W3CCX = Club Station
 (Operator W3SAO)

\$ = One-Way Contacts

STATIONS THAT SCORED OVER 5,000 POINTS

1.	K3IPM	43068	21.	W3HK	10534
2.	W3KKN	26598	22.	WA3FOF	9158
3.	W2EIF	26304	23.	K3DMA	8224
4.	W3ZD	26288	24.	W3CJU	7936
5.	WA3AXV	25140	25.	K3KTY	7812
6.	K3ZSG	23405	26.	K3MXM	7680
7.	K3IUV	19740	27.	W3ELX	7360
8.	WA3LNH/3	18210	28.	W3HFX	7280
9.	K3KMN	15960	29.	W3FQD	6840
10.	WA3DNC/3	15704	30.	W2AXU	6784
11.	WA3PIR	14040	31.	WA3OVH	6768
12.	W3CL	13986	32.	W3GEW	6330
13.	K3EOD	13150	33.	W3AJF	6300
14.	WA3NGK	13062	34.	WA3EPS	6030
15.	K1SFF/3	13056	35.	WA3AQA	5698
16.	K3GQJ	12768	36.	WA3DJF	5473
17.	WA2KOI	12750	37.	K3NMN	5430
18.	K3BPP	11600	38.	K3IGX	5404
19.	K3GAS	10868	39.	W3FGQ	5012
20.	K3JJZ	10676	40.	WA3HVD	5000

The following members participated in the final recap at W3ZD's QTH on January 20, 1973: W3AJF, WA3AQA, WA3AXV, WA3BIV, K3KPP, W3CL, K3DLS, W2EIF, W3FQD, K3GAS, K3IGX, K3IPM, K3JJZ, K3KMN, WA3LNH, K3MXM, WA3NGK, W3SAO, K1SFF/3, K3UJD, W3ZD and WB2SZK.



LOOKS FAMILIAR? WE AREN'T THE ONLY ONES THAT HAVE SUCH TROUBLE!!

FROM: NEWSLETTER -- MIDDLAND AMATEUR RADIO SOCIETY (BIRMINGHAM, ENGLAND)

LAS VEGAS SAROC CONVENTION, By WA3TEM

On Thursday, January 4, 1973, I flew to Las Vegas, Nevada for the Annual SAROC Ham Radio Convention held at the Flamingo Hotel. I was prepared for a few days of leisure basking in the warm Nevada Sun only to find out from the pilot before landing that the daytime temperatures ranged from 25 to 30 degrees and the night temperatures as low as 18 degrees. Obviously, that was the end of my bathing suit for a few more months.

The hotel was jumping with hams from all over the country, however, the majority of those attending were from California who drove their cars. Looking around the parking lot at the hotel was like seeing a sea of antennas, some automobiles having as many as ten antennas on the front hood, rear trunk lid, rear bumper and of course on the roof. It seemed that no matter where I went, either to other hotels on the strip or into town, I couldn't go without seeing at least a few cars loaded down with antennas. I think that for three days Las Vegas was taken over by "Hams". The casino's, hallways of the hotel, restaurants and the lounges were overrun by hams with handy talkies constantly in use.

The convention didn't actually get going until Friday morning at which time there was registration, scheduled speakers and of course the exhibit hall with various booths set up. Some of the company booths that I visited were as follows: International Signal Corp.; Motorola; Drake and Swan. A few of the organization booths I visited were QCWA, ARRL, YLRL and 73 Magazine.

It seemed that everyone came prepared with posters for their booth, so when Clegg and 73 didn't have one, I proceeded into town and got a few sheets of poster paper and magic markers and made each a sign.

There were several thousand people attending the convention and I was fortunate to meet many very nice people including Ed Clegg, W2LOY and his "XYL" (ISC, Clegg Division); Bill Ford the Editor of "The Printed Circuit" from California; John Waller, W3FSU of Surplus Electronics in Washington; Harry J. Dannels, W2TUK President of the ARRL; Richard Cowan, WA2LRO the Publisher of CQ Magazine; George McGinley, W6OGM, President of Swan Electronic W7UV, the President of Western Single Side Band Association; Wayne Green of 73 Magazine and many more.

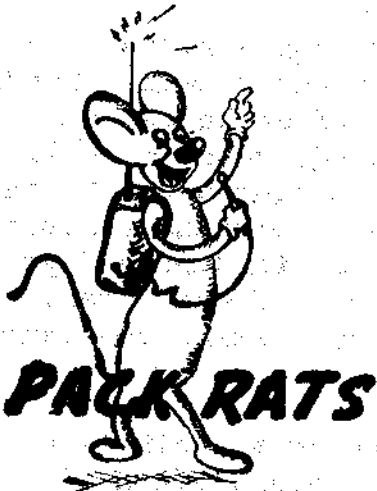
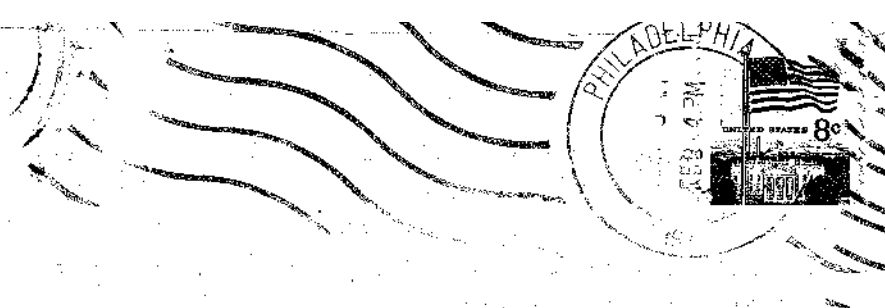
After a full day of convention going and playing the 5¢ one arm bandit machines, a full night of casino hopping and show going was in order.

So, after three full days of fun and meeting many great people, I was once again in the air on the way back to Philadelphia to remember winning some money, losing some money but most of all having a great time with all those at the SAROC convention.

73,

Marsha

Cheese Bits
 2087 Parkdale Ave.
 Glenside, Pa. 19038



W3KKN, Ernest Kenas
 2823 Old Welsh Rd.
 Willow Grove, Pa. 19090

MT. AIRY VHF RADIO CLUB, INC.

FIRST CLASS

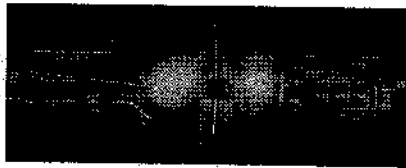
MEETING NOTICE

(215) OL 9-5900

AMATEUR RADIO IS OUR BUSINESS

"Ham" Berger, Inc.

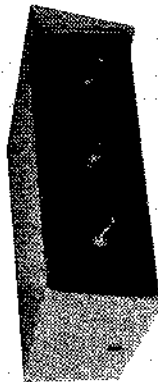
80 N YORK ROAD WILLOW GROVE, PENN 19090



HAM M JR. TR44

REGULAR HAM
 NET \$9.95 SPECIAL
 HAM NET WITH
 100 FT 8 WIRE
 CABLE

\$69.95
 PLUS POSTAGE WT. 20 LBS.
 PA. HAMS ADD 4.20 TAX



MODEL PP PHONE PATCH

TRANSFORMER COUPLED NO PRINTED
 CIRCUIT. LOW HUM LEVEL. GOOD HIGH
 LEVEL AUDIO. PRESS TO TALK. CUS-
 TOM MADE FOR YOUR TRANSMITTER
 NO MIC, CONNECTORS TO CHANGES
 SIMPLE TO CONNECT. SPECIFY TRANS-
 MITTER OR TRANSCEIVER.
 PLUS POSTAGE WT. 3 LBS.
 PA. HAMS ADD .90 TAX

Amateur Price..... **\$14.95**

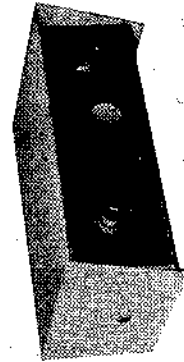


\$109.95:

PLUS POSTAGE
 WT. 32 LBS.
 PA. HAMS
 ADD 6.60 TAX

CDR MODEL HAM M

REGULAR HAM NET
 199.95
 SPECIAL HAM NET WITH
 100 FT. 8 WIRE CABLE



MODEL AJ1 AUDIO-JET

IF YOU OWN A RECEIVER OR TRANSCIEIV-
 ER THAT YOU WOULD LIKE TO INCREASE
 THE SELECTIVITY IN THE CW MODE AND
 REDUCE THE GENERAL QRN, YOU NEED
 THIS EASY TO INSTALL DEVICE. AUDIO
 SELECTIVITY VARIABLE FROM 100 CPS
 TO 8000 CPS CONTINUOUSLY. CONNECTS
 TO 4 OHM OUTPUT AND INPUT. THIS IS
 THE FINEST AUDIO FILTER IN THIS PRICE
 CLASS.

PLUS POSTAGE SHIP. WT. 2 LBS.
 PENNA. HAMS ADD .60 SALES TAX
 HAM NET **\$9.95**