

# PACK RATS'



## PACK RATS

CLUB CALL: W3CCX

MT. AIRY VHF RADIO CLUB, INC.

# CHEESE BITS



MT. AIRY V.H.F. RADIO CLUB, INC., PHILADELPHIA, PENNSYLVANIA (ARNS)  
 (50.2, 145.2, 221.4, 432.03 & 1296.3 Mhz) Repeater 222.98/224.58  
 AFFILIATED CLUB: AMERICAN RADIO RELAY LEAGUE  
 MEETINGS: THIRD THURSDAY OF EACH MONTH AT 8:00 P.M.  
 SOUTHAMPTON FREE LIBRARY, 947 E. STREET ROAD  
 SOUTHAMPTON, PENNSYLVANIA

VOLUME XVI

SEPTEMBER, 1974

NUMBER 9

### THE PREZ SEZ

The Pack Rat annual picnic was held August 11 at the Fort Washington State Park. Turnout was exceptionally good with over 200 registered guests plus numerous children. Fair weather prevailed, contributing to the good time shared by all. Thanks to K3IGX and his committee for a fine outing.

Don't forget the white elephant sale at this month's meeting. Joe, W3YXF, our host, has plenty of parking and a large yard ideally suited for handling many white elephants.

The Pack Rat 200 Mhz repeater has been at the factory for some time now undergoing rather extensive redesign and modification. Hopefully, the machine will be back in service by the time you read this and working better than ever. We regret the inconvenience to our many users, but feel the anticipated improvement in reliability and operating range will be worth the wait.

As of last count, there are only 6 FM-21 units still available at the special club price. If interested see Harry in a hurry.

Due to the underwhelming success of last month's cipher, we have another little subcranial conundrum to obfuscate your perspicuity and frustrate your perspicacity.

WAYNE GREEN SOLVED LAST  
 EFGHI JKIIH MNOPIV OFMR  
 SNHRTM UKGZRNJKFS. TNE VWV GNX VN?  
 MONTHS CRYPTOGRAM. How did you do?

73,

RON W3AXV

Solution to last month's crypto:

Don't NIT-PICK! Come to the picnic!

-ANON-

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.

\*\*\*\*\*

SWAP SHOP ITEMS - NO CHARGE

DEADLINE FOR ARTICLES IS THE GENERAL MEMBERSHIP MEETING.

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  
915 ROWLAND AVENUE  
CHELTENHAM, PA. 19012  
215 ES 9-5338

TRUSTEE OF CLUB CALLS: W3CCX - WR3ACD:

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

AWARDS CHAIRMAN:

W2EIF, JOSEPH KILGORE  
#5 SUNNYBROOK COURT  
STRATFORD, N.J. 08084  
609 - 783-9478

CLUB HISTORIAN:

W3SAO, FRANCIS BRICK

TYPIST:

W3TEM, MARSHA STEIN

OFFICERS: 1974-1975

PRESIDENT: WA3AXV, RON WHITSEL  
VICE. PRES.: W3HMJ, TONY SOUSA  
CORRES. SEC. K3KTY, JOHN TATE  
REC. SEC.: WA3DJF, CARL MATTIACE  
TREASURER: K3GAS, DOC CUTLER

DIRECTORS:

W3FQD, DICK HUNTZINGER  
K3ACR, RICH PATTISON  
WA3JUF, DAVE MASCARO  
K3KMN, GEORGE GAKOUMIS  
W3YXF, JOE RUGHTON

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

MONDAY NIGHT NETS:

		<u>NET CONTROL</u>
145.2	- 7:30 P.M.	W2EIF
50.2	- 8:30 P.M.	W3CL/K3ACR
221.4	- 9:00 P.M.	K3GAS
432.03	- 9:30 P.M.	K3IUU
1296.3	- 10:00 P.M.	W3HMJ


FRIDAY NIGHT ATV NET:

439.250 - 7:00 P.M. NET CONTROL K3ZKO/WA3AXV

PACK-RAT REPEATER - WR3ACD

222.98/224.58

EDITOR/PUBLISHER



Amateur Television Magazine  
P.O. Box 6512, Phila., Pa. 19138

Ronald Cohen K3ZKO

**J.C. R/C HOBBIES** 659-9773

Hours:  
Mon. & Sat. 10:00 - 5:00  
Tues. thru Fri. 10:00 - 9:00



**MINIATURE FLYING MODELS**  
Radio Control Equipment & Supplies  
Crafts for All Ages  
BOATS, TRAINS, CARS & PLANES

23 EASTON ROAD  
Willow Grove, Pa. 19090

JERRY COWAN  
Owner

CALENDAR OF COMING EVENTS

Syllabus by Lee, K3MXM

SEPTEMBER

- 1 19th Annual York County Hamfest - Elickers Grove - Thomasville, Penna. - 10 Miles west of York, Pa. off U.S. Rt. 30. A real good flea market, plenty of tail-gaters, picnic facilities and prize drawings, contests - 9 A.M. till 4:30.
- 4 Hamarama Committee Meeting - Qth K3MXM - Come one -- Come all.
- 7-8 VHF - QSO Contest - see August QST page 52 for full details and point counting. Starts 1900 GMT Saturday, Sept. 7 to 0600 GMT Monday Sept. 9. A good contest to enter and tune up equipment and antennas for January Contest and Space Net Contests.
- 8 South Jersey Radio Club picnic and hamfest - Molia Farms, Malaga, N.J. A real nice day in the country besides a country lake. Big flea market, manufacturers displays, prizes and contests. Easy to get to - just go South on Rt. #47 (Delsea Drive) approximately one hour from the Turnpike Bridge. Don't forget to stop at some of the famous Jersey Road stands and bring home some of that famous Jersey corn.
- 11 Board of Directors Meeting - Qth - W3SAO - Frankie Brick - 821 Lindley Ave., Phila., Pa. If lost call 324-7524. Directors and interested parties invited.
- 12-15 Panther Valley, N.J. Hammievention #4. Get in touch with John W. Richardt, Jr. - 94 Bald Eagle, Hackettstown, N.J. 07840 - phone (201) 852-3475.
- 14-16 Pennsylvania QSO Party 2300 Z Sept 14 to 0200 Z Sept 16th. Full details page 87 - August QST or Nittany ARC - Box 60 - State College, Pa. 16801.
- 14 Sercom picnic and meeting - Manheim Township Community Park, Neffsville, Pa. 12 noon till?
- 19 General Club Meeting - last outdoor meeting of the season. WHITE ELEPHANT SALE - bring those "goodies" to the sale in a S E A L E D box and watch the fun as the auctioning goes on. Proceeds 100% to the club. Qth - W3YXF - Joe Rushton - 107 Rosewood Drive - Lansdale, Pa. If lost call 855-7799.
- 21 Delaware Valley Chapter QCWA. Dinner meeting at Buck Hotel in Feasterville, Pa.
- 24 BARCC Directors and Delegates meet at the Ben Franklin Hotel in Phila., site of the ARRL Atlantic Division Convention in 1976. Dinner at 7:00 P.M., meeting at 8:30 P.M.

TID BIT

Carl, WA2MWB hosted an FB Directors meeting at his apartment Qth in Clementon, New Jersey. A long lost Pack-Rat was there - a slimmed down Lloyd, WA2K0I (My man in St. Louis).

## NEW PRODUCTS OF INTEREST TO HAMS

by Lynn, W3NSI

1. Solid State 2 M Amplifiers - Vibratrol Div. of EGI has entered the ham market with a line of 2 meter amplifiers giving power outputs of 40 to 150 watts with either 3 or 10 watts input. Units are used on 12 VDC with FM, AM, CW, or SSB modes. For CW and SSB operation, a relay delay can be added for a cost of 5 dollars, preventing switchover to receiver between dits and dahs. Models are also available for 6 and 10 meters. Prices range \$100-200.  
505 Harvester Court Wheeling, Ill. 60090
2. Frequency Counters - Hewlett Packard, a name normally associated with much higher priced equipment, now has two Counters in the ham market. Both use LED readouts. The #5381A covers the range 10 hz to 80 Mhz, and the #5382A covers 10 hz to 225 Mhz. Readouts are 7 and 8 digits. Both models have 3 position attenuators. 80 Mhz - \$249 225 Mhz - \$450 1501 Page Mill Road Palo Alto, Calif. 94304
3. Wattmeter - Dycomm has introduced a bidirectional wattmeter for use on 2 meters. Power in watts can be read directly on the meter both forward and reflected. Four ranges can be switched in 10-50-100-500 watts. Input and output coax fittings are on the front panel. Price \$50.  
Dynamic Comm. Inc. - 948 Ave. E - Riviera Beach, Florida 33404

## LIGHTNING FLASHES

by Lee, K3MXM

Special Call Sign - W5LACR The Newport County Radio Club will be operating this station in conjunction with the America's Cup Races through September 30th. All bands, CW, SSB plus 2 M and 6 M, QSL to Box 36, Broadway Station, Newport, R.I. 02840

CB Service Hits a New High The FCC reports that in June '61, 859 Class D - CB licenses were issued bringing the total for 6 months to 194,810. Amateur Radio Operator licenses for the month of June totaled 6,400. These facts make the lesson very evident.

HAMS and RFI - de Texas Lone Star Bulletin It seems that some radio amateurs are having trouble with the electronic systems in the Volkswagens. Twenty meter (14 Mhz) operation of a transmitter with an antenna on the rear bumper will kill the engine. On other bands or with different antenna positions the problem disappears. One of the newer problems for EMC engineers and one that will continue to get worse unless car manufacturers start using EMC engineers in their electronic system design stage. Who remembers the stories of lighting up the tail lights and forcing the brakes on various models with 6 meter rf?

Calming an Irate Neighbor with TVI, BCI or Hi-Fi - I can be much easier with the help of FCC Bulletin "Interference to Audio Devices." In the booklet the FCC points out that certain interference-eliminating components are omitted from most home entertainment devices because users never need them, and suggest that a letter or phone call to the manufacturer will usually help in clearing up the problem.

## TID BIT

While trying out for the cast of Evil Knievel's movie, Dick Pierce, K3MWV, recently sustained a leg injury when his motorcycle came out from under him. He then retaliated by doing some additional work on putting up a tower. Unfortunately he ended up in the cast, with only his leg being in it.

THIS IS YOUR LIFE (THE PACK RATS)  
Part #2 "A Constitution and By-Laws"

The September meeting was held at the Chelton Hills Recreation Center. Acting chairman W3FSC conducted the opening of the meeting. A Constitution and By-Laws was presented to the members present. This document was drafted by W3CPT. After discussion and revisions, this Constitution and By-Laws was unanimously adopted by the 17 members present, September 25, 1956.

A special meeting was called the same night to elect a slate of officers for the year 1956-57. NOMINATIONS: President W3FSC (13) elected W3TYX (4)  
 Vice-President W3ZEY (11) elected BOARD OF DIRECTORS: Nominations W3VGN (6) W3IBH (14) elected for 2yr. term  
 Secretary W3SAO (17) elected W3KKN (13) " " " " " "  
 Treasurer W3CPT (14) elected W3CL (9) " " " 1 yr. term  
 W3FOZ (3) W3TYX (6) " " " " " "  
 W3ALR (5) W3RZU (2)  
 W3VOC (5) W3NKD (2)  
 W3CCX (5) W3HWV (2)  
 W3HYO (3) W3UMI (2)

The first meeting of the Board of Directors was to be held in October. Members present and accepted by the Mt. Airy V.H.F. Radio Club under the Constitution and By-Laws:

W3CPT W3FSC W3ALR W3VOC W3ZEY W3TYX W3HYO W3HWV W3UMI W3DRC W3VGN  
 W3FOZ W3CCX W3OZP W3SAO W3IBH W3KKN W3CL

The October meeting featured a talk by Mike Ercolino, W2BDS who was introduced by W3IBH. The talk was on the development of beam arrays and how to stack them. Mike donated two beams as door prizes. W3OZP won a 3 element Telrex Beam and W3QAS won a 6 element Telrex Beam. W3NSI won a lapel call letter pin. The attendance was 50 hams and XYL's present.

Members: W3CL W3CPT W3FSC W3HWV W3HYO W3IBH W3RZU W3SAO W3ZEY W3DRC  
 W3KKN W3OZP W3UMI W3VGN

Applications for membership: W3QB W3AJF W3UQM

Our first "Ladie's Nite" was held at the November 14th meeting. President W3FSC announced the XYL's would take over the meeting and assume the office of their OM's.

PRESIDENT: XYL of W3FSC VICE-PRESIDENT: XYL of W3NKD, TREASURER: XYL of W3CPT  
 SECRETARY: XYL of W3SAO. The ladies proceeded to conduct the meeting and adjourned it at 9:00 P.M. and turned the meeting over to the OM's. A sports film on Ice Skating was shown, also movies of the August Picnic were shown. Refreshments all made by the XYL's were enjoyed by all. The ladies were thanked for their co-operation in making our first "Ladie's Nite" a success.

The December meeting was devoted to the January V.H.F. S.S. W3KKN gave a detailed account on the proper methods of operation and scoring. W3IBH also gave us the benefit of his know how on 2 meters. All members having 2 or 6 meter rigs promised to participate in the contest and turn their score over to W3KKN or W3SAO, as soon as possible.

APPLICANTS VOTED IN ON DECEMBER 19, 1956: W3FUL W3JAY W3AJF W3UQM W3NXT  
 W3CXU W3UKI

An ALMO gift certificate was won by W3DHH.

(To be continued)

Frankie W3SAO Club Historian

FRANKFORD CB'ers KEEP LOW PROFILE

by Tony - W3HNU

During the month of June 1974, the Scott Research air monitoring van made air pollution measurements in the Frankford section of Philadelphia as part of a Penn Det highway study. Pack-Rats will remember this van as the one used for our "home brew" exhibit at the 1973 Hamarama. It's a Winnebago camper truck converted into a mobile air monitoring laboratory.

After the van was on location for about a week in one Frankford neighborhood, a young boy from the neighborhood asked the van's crew if they had caught any CB'ers. After he had been convinced by the van's crew that they were not connected with the FCC, but were in fact making air pollution measurements, the young boy told the van crew that all the unlicensed CB operators in the area had very carefully stayed off the air that week to avoid detection by what they thought was an FCC monitoring crew.

Apparently the recent FCC policing of clandestine CB operations has caused some anxiety to those who indulge in the CB form of "air pollution."

SPACE NET CONTEST RESULTS

July 20-21, 1974 Winners

CLASS I      1st - W2EIF  
              2nd - WA2PBZ  
CLASS II     1st - K3GQC  
              2nd - W3ETB  
CLASS III    1st - WA2EFV  
              2nd - WA3HOW  
CLASS IV     1st - WA3NBQ

CLUB WINNERS

1st Place - Mobile 6 ers (K3GQC)  
2nd Place - Warminster (WA3HOW)

CONGRATULATIONS TO THE WINNERS.

We attended the last of the minifests at Tony's where Joe W2EIF received his award. Many of the Space Net gang were there and enjoyed the memorable WB2MTU hospitality. Best wishes for a job well done Tony.

OFFICIAL BULLETIN NR 496 FROM ARRL HEADQUARTERS NEWINGTON CT AUGUST 15 1974  
TO ALL RADIO AMATEURS BT

FCC has proposed a new schedule of fees for nearly all radio services, to comply with a recent ruling by the Supreme Court. The principal criterion laid down by the court is the value to the recipient. For amateurs, the basic fee would be six dollars for a five year license, as opposed to nine dollars at present and ten dollars in the 1972 proposal which has never become effective. Modifications without renewal are proposed at five dollars, against four now and five in the 1972 list. Special call sign fees would remain at twenty five dollars. Novice licenses, RACES authorizations and military recreation stations would continue to be free of charge. Comments are due by September 20 and reply comments by October 4, making reference to Docket 19658. The procedural requirement of an original and fourteen copies applies as usual. AR



**ADS**

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

<p>NE 7-0328</p> <p><b>GEORGE S. VAN DYKE, JR., P.E.</b> COMMUNICATIONS ENGINEER</p> <p><b>W3HK</b></p> <p>4807 CONVENT LANE PHILA., PA. 19114</p>	<p><b>AMERICAN RADIO RELAY LEAGUE, Inc.</b> HARRY A. McCONAGHY, W3SW/W3EPC DIRECTOR, ATLANTIC DIVISION, ARRL</p> <p>"Condo-Mac"</p>	
<p><b>INTERNATIONAL</b></p> <p><b>PHIL THEIS</b> Class Div. General Manager K3TU</p> <p><b>ISC</b> 3050 Hampden Road Lancaster, Pennsylvania 17601</p> <p>TEL: (717) 299-2671 TELEX: 64-942P CABLE: INTERSIS</p>	<p>W3CL</p> <p><b>HARRY B STEIN ASSOCIATES</b> COMMUNICATIONS CONSULTANTS</p> <p>2067 PARKDALE AVE GLERSICK, PA. 19034</p>	
<p><b>ham radio</b> the most interesting amateur magazine</p> <p>1 Year \$7.00, 3 Years \$24.00</p> <p><b>HAM RADIO MAGAZINE</b> BOSTON, N. H. 03048</p>	<p><u>A request from your AD Manager</u></p> <p><b>PATRONIZE OUR ADVERTISERS</b> Tell them you saw their ad in <b>CHEESEBITS</b>, Leave your QSL card with them. <b>CHEESEBITS</b> is one of the best read local radio club papers. Circulation - 300</p>	<p><b>73</b> <b>magazine</b> for radio amateurs</p> <p>PETERBOROUGH, NEW HAMPSHIRE 03458</p>

SWAP SHOP

FOR SALE: The Pack Rat 220 Mhz repeater now back in operation - Mobile antennas available for fast installation \$20.00

Contact: W3CL, Harry Stein  
(215) TU7-5052

FOR SALE: 432 Mhz YAGI kits - 13 elements - 8 ft. boom. All the parts to build the insulated YAGI as described by K2RIW in the new ARRL antenna **handbook**.

- Proven high performer at East Coast Antenna Measuring Contest.
- Drilled 6061-T6 Boom
- Machined Plexiglass blocks
- Cut brass and aluminum elements
- Aluminum "POP" rivets-\$16.95 ea.

Contact: Tony Souza, W3HMU - Box 169  
Ottsville, Pa. 18942  
(215) 847-5017

FOR SALE: Ham radio name badges-fast service - special rates for quantity orders from clubs. All other types of engraving - Trophys, etc.

Contact: Gene Bond, Jr.  
WB2UVB/WA7UJW  
15 East Camden Ave.  
Moorestown, NJ 08057  
(609)234-3926

FOR SALE: Kraft 4-channel, 2 stick radio control Xmitter RCUR, battery pack & 4 KPS-12 Serous - Excellent condition on 53.5 Mhz.  
\$200.00

Contact: Doug Adams, K3TZR  
(215)659-0718

FOR SALE: MONITOR SCOPE - Type 90932 by Millen with instructions-good for 75 thru 6 meters \$50.00

GONSET COMMUNICATOR II-A-2 meters (Club rig-good condition) \$50.00  
GONSET COMMUNICATOR III-6 meters (Club rig-good condition) \$50.00

Contact: Rich Pattison, K3ACR  
(215)885-3830

For Sale: 5 foot equipment rack cabinet rear door, coasters and heavy duty pwr cable-\$15.00 Contact W3KKN, Ernie Kenas, 215-659.3485.

# BARRACKS TRADING POST



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

665-0358  
 MAIN OFFICE

## Communications Sales and Service Co.

GEORGE A. RYAN  
 General Manager

23 WILLOW ROAD  
 MAPLE SHADE, N. J. 08052



## Scott's Surplus Electronics

134 E. Park Av. Merchantville, N.J. 08109

Division Of dab Associates Inc.

Pres: Scott Layman

609 - 665-2166

AMIL S. GUMULA  
 PRESIDENT

HALLCRAFTERS  
 FACTORY AUTHORIZED  
 SERVICE

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

## ELECTRONIC EXCHANGE

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

New & used antennas

GORDON R. KITTEL  
 K3AIG

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

Dave Jones - W3BJT  
 Ben Schaefer - W3JATP  
 Phyllis Dorey - W3JOWG

Suburbs: (215) 440-2300  
 Phila. (215) 528-6120

## KASS ELECTRONICS DISTRIBUTORS

DISTRIBUTORS OF  
 RADIO - TELEVISION PRODUCTS  
 INDUSTRIAL ELECTRONIC PARTS & EQUIPMENT



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

A. G. RADIO PARTS CO.  
 939 TOWNSHIP LINE RD.  
 ELKING PARK, PENNA. 19117  
 TELEPHONE: 215 - 886-5100

Authorized  
 Distributor



215 888-8140

O. E. MARTIN  
 MANAGER

LAFAYETTE RADIO ELECTRONICS  
 of Chylstehen, Inc.

6158 OGDONTZ AVENUE WYNGOYE, Pa. 19088

215-674-0300



## LAFAYETTE RADIO ELECTRONICS

"Associate Store"  
 531 Easton Road  
 Horsham, Pa. 19044



PARTS - TEST EQUIP

Ed Clark



215 782-0241

J. E. GOMBERG  
 MANAGER

LAFAYETTE RADIO ELECTRONICS  
 of Oxford Valley, Inc.

174 OXFORD VALLEY MALL LANGHORNE, PA. 19047



JK 3-4660  
 4661

LEE A. COHEN

CLAYTON L. HARY & SON  
 INCORPORATED  
 4527-31 HEDGE STREET  
 PHILADELPHIA, PA. 19184

WIPING RAGS  
 POLISHING CLOTHS  
 COTTON & WOOLLEN WASTE



ELECTRONIC CENTER  
 SCHLUMBERGER PRODUCTS CORP.  
 OVER 300 ELECTRONIC KITS

TED HALDIS  
 MANAGER  
 K3EPK

6818 ROOSEVELT BLVD.  
 PHILA., PA. 19148

TELEPHONE  
 R19 CU 8-0180

W3CJU

## DONALD KRAUT HAMPTON

Jeweler - Watchmaker

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

Phone  
 Bus. 348-4884  
 Res. 348-8969

LOcust 7-7130

K3KTY

## TRANSPORT EQUIPMENT COMPANY

"Everything for the Truck"

JOHN A. TATE  
 PRESIDENT

2215 - 2217 RACE STREET  
 PHILADELPHIA, PA. 19103

## PATRONIZE OUR ADVERTISERS

Tell them you saw their Ad in

CHEESE - BITS



W3KKN

ERNEST KENAS

TOOL DESIGN  
 MANUFACTURING ENGINEERING DEPARTMENT

THE BUDD COMPANY  
 AUTOMOTIVE DIVISION

PHILADELPHIA, PA.

609-429-0087

BRADDOCK ASSOCIATES  
 MANUFACTURERS' REPRESENTATIVE

EDWARD BRADDOCK  
 MEMBER: E.R.A. & I.E.E.E.  
 WZBAY

POST OFFICE BOX 306  
 HADDONFIELD, N. J. 08033



COMPLETE HOME WINE MAKING SUPPLIES



## WINE CELLAR SUPPLY HOUSE

BETHLEHEM & BUTLER PIKES  
 AMBLER, PA. 19002

JOHN COSTA

(215) 643-3565

(609) 653-9236

SWEETMAN CALIBRATION SERVICES  
 ELECTRONIC TEST EQUIPMENT CALIBRATION

GERHARD J. SWEETMAN

2672 GLADWYN ROAD  
 PENNSAUKEN, N. J. 08109



THE PICNIC REPORT  
by Dick, K3IGX, Chairman

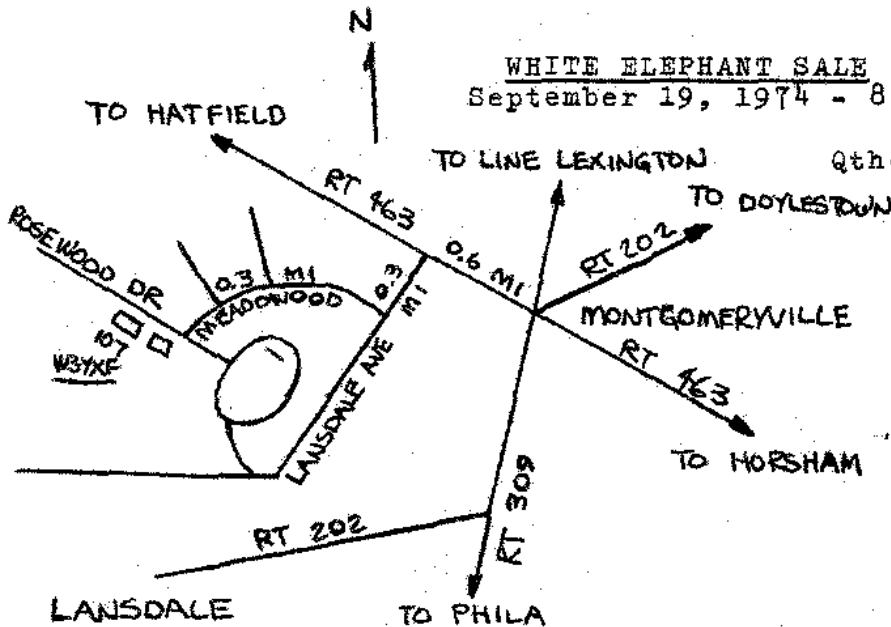
Another successful picnic has come and gone with an attendance of over 200. The weather was very favorable, in fact, the nicest day in years.

I want to take this opportunity to thank the following members who were a great help to me: K3GAS, W3CL, K3ACR, K3JJZ, K3MXX, W3ELX, K3EOD, W3SAO and Helen and Harry, K3DLS, W3KKM, W2EIF, WA3DJF, WA3JUF and WA3AXV.

There were 10 Delaware Valley clubs represented and two visitors from a long distance away - Simon, G3ZKE from London and Jack, K9CUN from Terra Haute, Indiana. 15 members of the QCWA, Delaware Valley Chapter joined the fun as well as Connie-Iac, W3SW the Atlantic Division Director.

I believe nearly everyone received a prize and thanks to the following donors:  
The Pack Rats - Helen Brick (Mother Rat) - Ham Buerger, Inc. - Tab Books - Howard Sams & Co. - Spectronics - FM People - Bell Industries J.W. Miller Div. - RCA, Moorestown - Ham Radio Magazine - K3IGX - Radio Amateur Callbook, Inc. - 73 Magazine - Heath Co. - K3ACR - W3SAO

WHITE ELEPHANT SALE  
September 19, 1974 - 8 P.M.



Qth-Joe Rushton, W3YXF  
107 Rosewood Dr.  
Lansdale, Pa. (215)855-7799

From Willow Grove - Rt. 63 to  
Rt. 309 - Montgomeryville.

From Phila. - 309 Expressway to  
Montgomeryville

From Doylestown - Rt. 202 to  
Montgomeryville

From Norristown - Rt. 202 to  
Montgomeryville

CENTRAL STATES VHF SOCIETY VHF CONFERENCE, 1974

by John B. Power, W2AXU

The CSVHFS held their annual VHF conference in Boulder, Colorado on August 16, 17 and 18, 1974. The conference was well attended by many serious VHFers representing all call districts and VE3 from Canada. Approximately 100 radio amateurs were registered, many with their families.

The conference started Friday morning, Aug. 16th with a Society business meeting. Officers for the coming year were elected - President W5BXG, Charles Calhoun, Tulsa, Oklahoma, Vice-President W5WAX, Sam Whitley, Muskogee, Oklahoma, Secretary W4FW, Ted Mathewson, Richmond, Virginia.

Next years conference will be held in the Tulsa, Oklahoma area on August 15, 16, and 17, 1975.

A trip was made to Fort Collins, Colorado to tour the facilities of the National

Bureau Standard radio station WWV-WWVB.

The afternoon session began with a presentation by Don Hilliard, WØEYE, on "The Techniques of Making a Parabolic Reflector of Wood Construction and a Large Disk of Metal Construction." This presentation was most interesting. The projects are highly ambitious, but result in very satisfactory, almost commercial like, parabolic reflectors. A paper was available with the details of construction, design information and photographs.

The second presentation of the afternoon was made by Dick Davis of the National Bureau of Standards, Boulder, Colorado on "The Use of the Television Network Color Subcarrier as a Frequency Reference." The four major television networks in the U.S.A. use rubidium atomic frequency standards to generate their color reference signals. The NBS checks these signals and publishes the off-sets. Your color TV receiver locks onto the color subcarrier signal. When your set is tuned to a network program, its internal 3.58 Mhz oscillator generates a replica of the atomic oscillator signal at the network studio. With some electronics you can have a highly accurate calibrating source.

The Saturday session started at 8 A.M. with an interesting presentation by Jan King, W3GEY, Vice-President of AMSAT on "Oscar 7 and Beyond."

Bruce Clark, K6JYO and Vic Frank, WB6KAP presented movies and tapes of the WA6LET moonbounce operation.

Carl Scheidler, W2AZL, of Bell Telephone Laboratories discussed "Solid State 2 meter Converters." This information is a must for serious 2 meter operators. He discussed pre-amplifiers, FET ballanced mixers and filters.

Joe Reisert, W6FZJ/1 of Alpha Corp. followed and discussed "VHF-UHF Solid State Receiver Designs." Joe went into much detail of the design of VHF/UHF converter circuits. He particularly stressed the advantages of modular construction such as a good well filtered local oscillator which can be used time and time again to control experimental RF and mixer modules. His thoughts are very worth while considering in constructing new equipment.

Gary Grey W6KJD/K6QED of Hughes Ground Systems continued the VHF/UHF receiver design discussion with his presentation on "Filter Design." He discussed many types of filters for use in converters and their design and construction.

Marshall Williams, WA5UNL, of Tulsa, Oklahoma discussed the construction of a 2 meter amplifier and an array of 2 meter antennas for use in moonbounce operation. Marshall, not being a mechanic by his own admission, used pieces and parts as they are available or as he put it - "The natural order of things." The projects are successful as attested by his successful operations.

The banquet was held Saturday evening at which time the John T. Chambers Memorial Award was presented. The award was won this year by Dick Knadle, K2RIW. Dick was not present this year, but Mrs. John T. Chambers was and she presented the award to Dick through Carl, W2AZL. The guest speaker of the evening was Tom McMullin, W1SL, of the ARRL. Many fine prizes were awarded following Tom's fine talk.

The Sunday morning session consisted of a Moonbounce Panel and Discussion which provided much thought-provoking discussion. My first attendance of these VHF conferences was in 1969 at Boulder, Colorado. It is interesting to note that at that time there were only two East Coast attendees - W1HDØ and myself. This year

the East Coast was well represented and - of all things - by three Pack Rats - W2AXU, K3ZSG and K2EVW - and one ex-Pack Rat - K2RTH (better known as K2RG). Others from the area were WA2WOM, W2UK and W2AZL.

It was a most interesting conference technically, as usual, and socially. It's great to meet old friends and to make new ones. See you all in Oklahoma next August.

VHF REPORT  
by Jo, W2EIF

The VHF bands have been relatively quiet. People on vacation and other activities seem to have taken more of their time. Net activity has dropped down also due to the same reasons. WB2MTU's space net contest July 20-21 perked things up a little. I found the contest a lot of fun.

The big activity on two meters during the last half of July and the first half of August has to do with communications over relatively long distances on 2 meters using the reflections obtained from meteor trails. There are two meteor showers available namely, The Aquarids-July 26-31. This shower is overlapped by the Perseids which occur July 27 to August 14. If you are interested, there is a table in the front of the ARRL VHF hand book, detailing the various meteor showers available. The Perseids, which recently occurred, were used by this writer to work W0LER in Minnesota and K0WLU in South Dakota. The latter was worked while calling CQ Random i.e. without previously scheduling.

It has always been the theory that large antennas and high power were required. This was disproved recently when W4DFK in Virginia worked 5 or 6 new states including Texas using 80 watts of SSB and an 8 element beam. 432 Mhz has been good at times, but with little activity. Have heard W1DXX, K1AQP/1 and others in the Boston Area, but not much else.

OFFICIAL BULLETIN NR 495 FROM ARRL HEADQUARTERS NEWINGTON CT AUGUST 8 1974 TO ALL RADIO AMATEURS BT

The ARRL Intruder Watch is celebrating its tenth anniversary with a drive for more volunteers to help in the aggressive preparations for the World Administrative Radio Conference to be held in 1979. Reporting cases of harmful interference from stations of other services operating in the amateur bands and developing related statistics will be useful ammunition during the upcoming WARC. If you can spend an hour or so a week helping to defend the amateur radio service, write for detailed instructions to ARRL Intruder Watch, 225 Main Street, Newington, Ct. 06111 AR

TID BITS

Don Cooper, K3WGK and KYL, Virginia, were flying from Philadelphia to Pompano Beach, Florida to visit with K4UV and family. Don, an excellent pilot, who flies his own well equipped twin engine aircraft was last heard from on Sunday, August 11th at 12:15 P.M. near Savannah, Ga. They never arrived their destination. The next morning at daybreak, a massive search was launched by the "CAP" and the Coast Guard. The search continued all that week with no trace of the aircraft. Our prayers are with Bruce, K3WGU and his sister Dea.

The August outdoor meeting hosted by Doc, K3GAS and Loretta was a gala affair. The ladies especially seemed to enjoy the slides, the refreshments and the socialability. We were particularly pleased to see Ray, W3BHR and Eleanor both looking exceptionally well. A Pack Rat, W3GXU, who has been very busy lately, showed up smiling all the way.

THE MT. AIRY VHF RADIO CLUB, INC.

THIRD ANNUAL

# H A M A R A M A

EXPANDING TO BIGGER SITE

ROUTE 611      BUCKS COUNTY DRIVE-IN MOVIE      WARRINGTON, PA  
( EASTON ROAD )      5 MILES NORTH OF WILLOW GROVE

SUNDAY OCTOBER 6, 1974

9 AM to 4PM      RAIN OR SHINE

FLEA MARKET AND AUCTION OF AMATEUR RADIO EQUIPMENT

PARKING FOR OVER 500 CARS

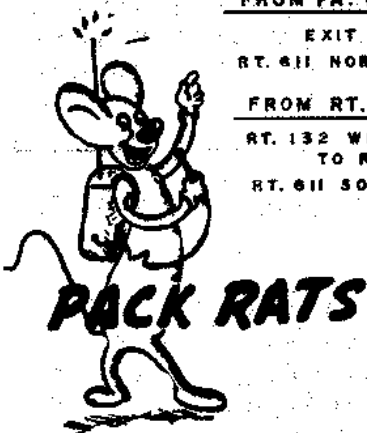
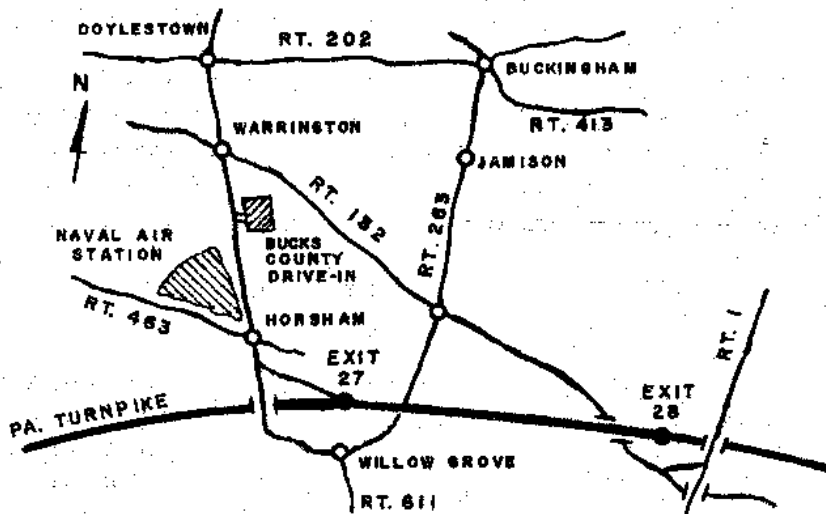
AUCTION AT 2 PM

FROM PA. TURNPIKE

EXIT 27  
RT. 611 NORTH 4.3 MILES

FROM RT. 1

RT. 132 WEST 12 MILES  
TO RT. 611  
RT. 611 SOUTH 0.3 MILE



MT. AIRY VHF RADIO CLUB, INC.

REGISTRATION  
\$1.00 PER ADULT

AMATEUR TV DEMONSTRATION  
HOME-BREW VAN EXHIBIT

FOOD AND DRINK AVAILABLE

NEARBY MOTELS AND RESTAURANTS

TALK-IN W3CCX / 3

52.525      146.52      224.58

SALE REGISTRATION

\$2.00 TAIL-GATE SELLING ONLY  
BRING YOUR OWN TABLE

VHF SPECIALISTS

RAG CHEW

INFO.: K3MXM CHAIRMAN  
8242 BROOKSIDE RD  
ELKINS PARK, PA 19117

PHONE: 215 645 4942

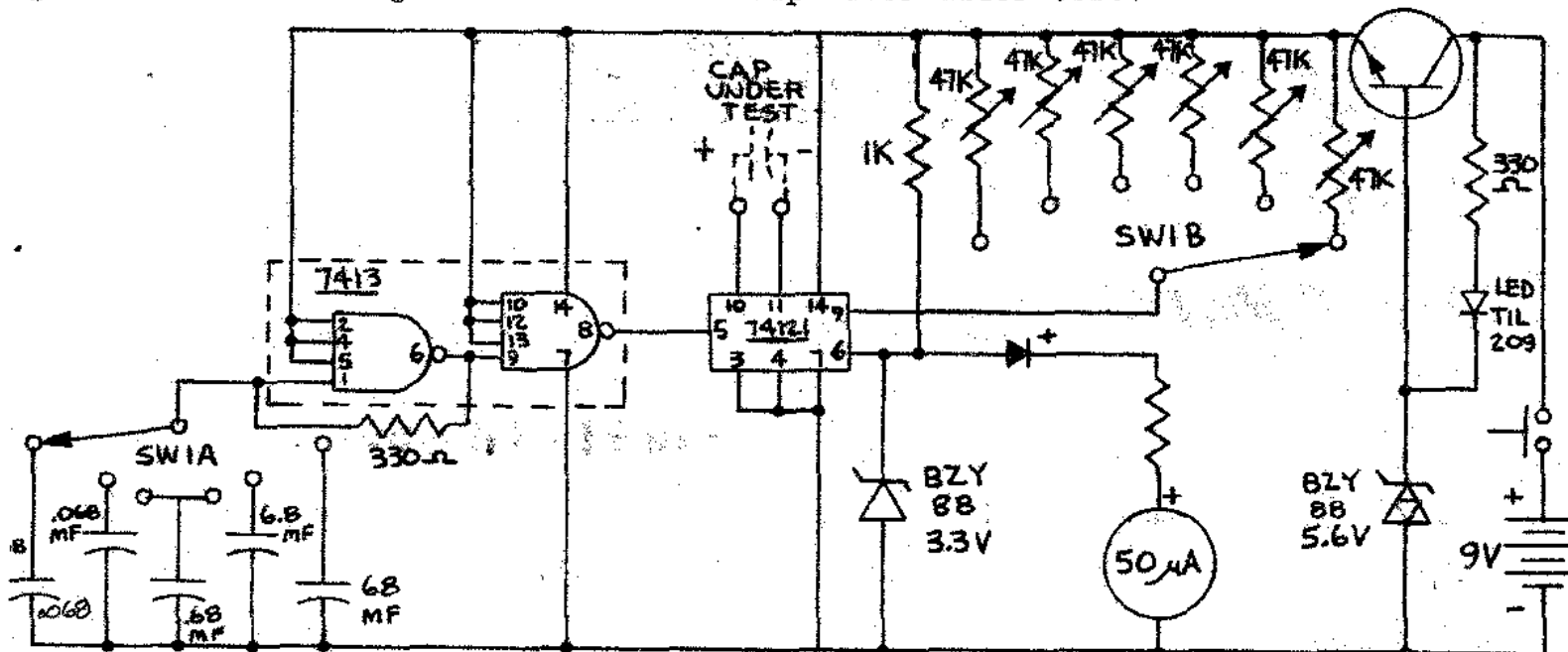
# A CAPACITY METER

by Bob Palmer, G5PP

from Midland Amateur Radio Society News Letter

To those who would like to have an exercise with the use of IC's and also find the value of those capacitors in the junk box, which have long since had their values rubbed off, the unit described will prove of interest.

The circuit is straight forward and when completed works very well indeed and gives direct reading of the values of capacitor under test.



All pots are the sub-miniature preset type, all capacitors are 12v transistor types and the values are not critical.

Calibrate by using 1% tolerance capacitors across the test points and adjusting the appropriate pot for full scale reading.

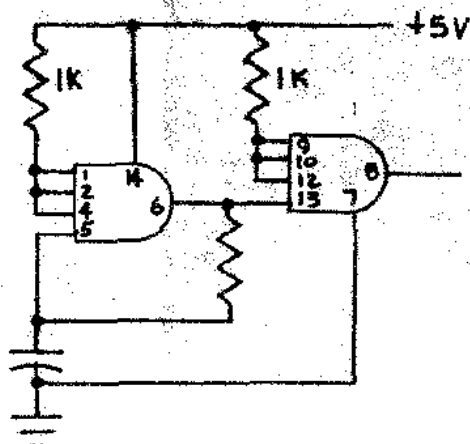
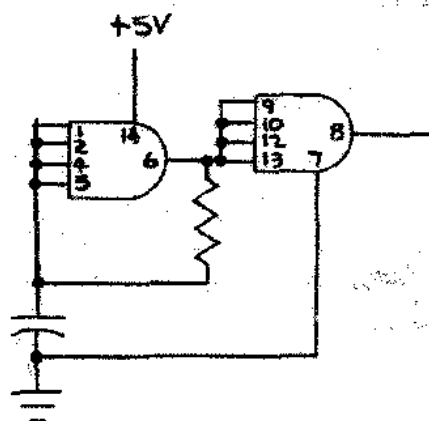
Range 1,... 0-100pf, use 100pf +/-1%      Range 4,... 0-0.1mf, use 0.1mf 1%

Range 2,... 0-1000pf, " 1000pf 1%      Range 5,... 0-1mf, " 1mf 1%

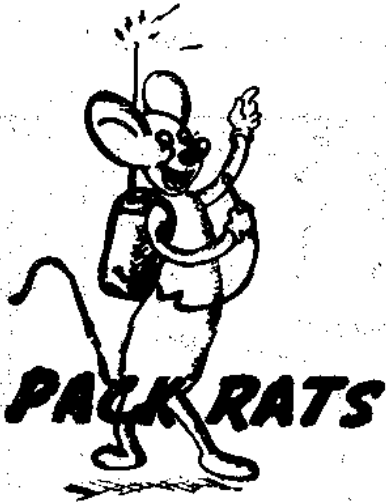
Range 3,... 0-0.01mf, " 0.01mf 1%      Range 6,... 0-10mf, " 10mf 1%

The unit consumes about 40mA so just press switch long enough to find range.

Editorial Comment - Manufacturers of integrated circuits recommend that unused gate inputs are either connected to used inputs or taken to the plus rail via a 1K resistor. Pins 2, 4 and 5 of the 7413 above could be connected to pin 1, and 10, 12, and 13, connected to pin 9, or pins 2, 4, 5 via 1K to +5v, and pins 10, 13, 12, via 1K to +5v.



Cheese Bits  
2087 Parkdale Ave.  
Glenside, Pa. 19038



W3FQD Dick Huntzinger  
130 Fairhill Drive  
Churchville, Pa. 18966

MT. AIRY VHF RADIO CLUB, INC.

**FIRST CLASS**

**MEETING NOTICE**

# AMATEUR RADIO EQUIPMENT

*"Ham" Buerger, Inc.*

88 N YORK ROAD, WILLOW GROVE, PENN 19080  
(215) OL 9-5900

## STORE HOURS

Mon. 9:30 to 5:30  
Tue. 9:30 to 5:30  
Wed. 9:30 to 9:00  
Thur 9:30 to 5:30  
Fri. 9:30 to 5:30  
Sat. 9:30 to 5:30