

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 XVII

JANUARY, 1975

NUMBER 1

THE PREZ Sez

HAPPY NEW YEAR! May the new year bring you lots of RF and little TVI. By this time the January Contest is history and I want to thank Rich, K3ACR, for doing a fine job of running the event for the club again this year. By the way, this month's cryptogram describes the contest operation as viewed by many of our members. This brings us to the subject of this month's meeting. The annual Crying Towel session is always a fun meeting with many a tale of woe being told. Lets all come to this one and find out that you were not the only one who had problems. There will be a prize to the member who has the best story.

February's meeting is Home Brew Night, so finish all those projects that never seem to get done and bring them along to the meeting. Also, Tony is thinking of adding something new to Home Brew Night that should be most interesting. More on this later.

The membership unanimously passed an amendment to our Constitution allowing for the appointment of an official club Historian. As some of you know, Frankie, W3SAO, has been doing this job for a number of years without a great deal of recognition. The club history is important and should be preserved for posterity. So, at this time, I would like to announce that I have appointed Frankie, W3SAO the clubs first Official Historian. Congratulations Frankie and thank you. This month's cryptogram:

SDNGENDQP PQMK83 833 9QD317 04 (5P890).

73 Ron WA9AXV

Solution to last months cipher: The price of honesty hasn't increased. It was always high.

PACK RATS' CHEESE BITS IS A PUBLICATION OF THE MT. AIRY V.K.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: W3AXV, RON WHITSEL
VICE. PRES.: W3HMJ, TONY SOUSA
CORRES. SEC. K3KTY, JOHN TATE
REC. SEC.: W3DJF, CARL MATTIACE
TREASURER: K3GAS, DOC CUTLER

DIRECTORS:

W3FQD, DICK HUNTZINGER
K3ACR, RICH PATTISON
W3JUF, DAVE MASCARO
K3KMN, GEORGE GAKOUMIS
W3YXF, JOE RUSHTON

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. K3IUV |
| 1296.3 | - | 10:00 P.M. W3HMJ |


FRIDAY NIGHT ATV NET: NET CONTROL

439.250 - 7:00 P.M. K3ZKO/W3AXV

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

JANUARY

- 1 HAPPY NEW YEAR. Dues are due and payable - see Doc, K3GAS
- 4 - 5 THE CONTEST
VHF Sweepstakes. 2:00 P.M. Saturday till midnight Sunday. A total of 34 possible operating hours. Will look for all of you on the air.
- 6 Monday Nite on the Nets - Hypnomania Day
- 8 Board of Directors Meeting, QTH WA3DJF, Carl Mattiace. 7317 Ryers Avenue, Phila., Pa. If lost, call RA 5-1928
Directors and interested parties invited.
- 15 WLAW Qualifying Run on CW.
- 16 General Club Meeting - Southampton Free Library - Street Road
Southampton, Pa. 8:00 p.m.
Crying Towel Session: This is usually one of the funniest meetings of the year. Bring your stories and tales of woe. Naturally, there will be a prize for the worst case of the MURPHIES (pardons to K3ZSG)
Other Surprises. Club members, visitors and friends cordially invited.
Doc's Silent Auction, The MARIO RAFFLE, Refreshments.
- 18 Saturday Morning. 10:00 a.m. Wrap up session at Dave's W3ZD.
Counting the points and checking the logs. Bring your calculator and abacuss...
- 25-26 Simulated Emergency Test. More information on the various RACES and CD Nets. Check in with your local EC

FEBRUARY

- 12 Board of Directors Meeting QTH - K3GAS, Dor Cutler.
- 20 General Club Meeting - Home Brew Nite: Bring your pet project in for examination and prizes. Also something new has been added. A lot of you have secondary hobbies besides electronics and many of them are very interesting. So, along the lines of show and tell, bring something representative in and let us see and know. Many of you build your own fishing equipment, rods and lures, many of you are woodworkers, some of you are naturalists and grow exotic plants and a couple of you build pyramids. So here is your chance to pop a few buttons and amaze the rest of us.

JUNE

- 14-15 VHF QSO Party, Hilltown, here we come...WOW!!!

* * *

CONGRATULATIONS TO THE NEW OFFICERS AND DIRECTORS OF PARA FOR 1975:

| | |
|--------------------------------------|-------------------------------------|
| President: W3GJC, Bill Cusick | Director, N.E. K3ZFD, John Brochon |
| Vice-Pres: K3GKB, Jesse Wagner | Director, S.E. WB2KJK, Bill Powell |
| Treas. : K3VFL, Tom McGlynn | Director, N.W. WA3GAA, John Chapman |
| Cortes. Secy: WA3TSW, John Robison | Director, S.W. K3QNT, Lloyd Roach |
| Record. Secy: W9ELB/2, Warren Norman | |

NEW PRODUCTS OF INTEREST TO HAMS

By Lyn: W3NSI

1. UHF Modules - Spectrum International: Two units, one covering 432 Mc (MMV432H), and one covering 1296 Mc (MMV1296H) are being sold by this company. The 432H is designed to be driven by a 2 M transmitter with a power of up to 70 watts output. At this level the tripler puts out about 35 watts on 432. This power can then be fed to the 1296H tripler unit to provide 15-20 watts on that band. Both modules are pre-tuned ready to just connect the BNC fittings to antenna and driver unit. Price - 432 \$165 1296 - \$155.
P.O. Box 1084, Concord, Mass. 01742

2. Digital Clock: Corvus Corp. has just introduced a 24 hr. clock built into a 2 1/2" cube which also includes a 10 minute ID alarm. A four digit readout uses a LED type display, while seconds are indicated by a pulsing lamp. Price - \$40.00.
13030 Branch View Lane, Dallas, Texas 75234.

3. BNC Jacks: These units may be of use to those experimenters who run coax leads through panels or chassis and wish to isolate the shields from ground. In the past, it was possible to do this only by using insulated washers on the metal work. Amphenol RF Div. now has a line of BNC sockets to solve this problem. The part number is 31-010 and the unit meets ALL Mil. Specs. Price about \$1.00 each.
33 E. Franklin St., Danbury, Conn. 06810

* * *

TID BITS

Ray Whitehead, W3ZRR is back in the hospital. Drop him a card at the Oncologic Hospital, Central Avenue and Shelmire Street, Phila., Pa. 19111, Room 109A.

W3CXU writes "Two days after completing a 2 month antenna project came the Big Wind! Result: Beams 45° polarized, still operative? Wanted - Mechanical Stress Analyst."

Joe Reisert, W1JAA (Ex W6FZJ) has issued EME Note #4. This note and previously issued ones are available for an SASE. QTH is 17 Mansfield Dr., Chelmsford, Mass. 01824.

Do you want "PRYAMID POWER" -- Contact, Rich, K3ACR.

If you want a nice certificate from the oldest licensed high school club in the U.S. - work W3YC on the 220 MHZ Pack-Rat Repeater during school hours.

WA3AXV our Prez is setting up a club committee to study and comment on FCC docket 20282 concerning restructuring of the amateur service.

A memorial service for Don and Virginia Cooper (K3WGK) was held at the Abington Friends Meeting House, Jenkintown, Pa. on December 28, 1974. The couple were lost on Don's aircraft flight to Florida to visit their folks (K4UV). They leave many sad family members and friends.

* * *

220 MHZ FM - DE K3DLS

The following calls have been heard or worked on the 220 MHZ Pack-Rat Repeater:

| | | | |
|--------|--------|--------|--------|
| K3ACR | K3DMA | W2HX | WA3SPR |
| W3AJF | W2EIF | K3IGX | W2SVV |
| WA3AXV | W3FQD | WA2III | W3TNP |
| W2AXU | W3FUN | K3IPM | W3YXF |
| WA3CAG | W3FXA | W3KKN | WA2WYE |
| W3CIL | K3GAS | W3MPY | W3YC |
| W3CL | W3HAF | WA2MWB | W3ZD |
| W3CLT | W3HPY | W3MWV | K3ZSG |
| W3CXU | WB2HHJ | W3NSI | |
| K3DLS | W3HMU | K2SMZ | |

VHF REPORT
By Jo, W2EIF

The VHF bands have continued to show little activity although there have been a few new signals showing up on 2 meters - probably getting ready for the VHF contest. I don't know how many of our members know that the Pack Rats sent out a packet of contest information every year just prior to the Jan. VHF Contest. The package includes a list of Pack Rats, a DX list and an ARRL Contest report sheet. The letter is something new in that it was suddenly realized that many of the people that were contacted probably did not have contest forms and may not have participated in the past due to the lack of a report form. Correspondence indicates that the package of information is appreciated. The meteor shower of Dec. 10-14 did not produce any results in the local area known to this writer and have heard no reports of contacts to date. As a matter of fact, I have heard several operators say that the shower was not up to the level exhibited by the last two showers of the same period. There are a few openings to be heard on six meters at this time of year but this is normal and I attribute this to the fact that the Es season is just now peaking in S. America and my theory is that the Northern Hemisphere gets some Es activity as a result - sort of a spill over so to speak. The contest should produce the usual activity on 6 and 2 plus the usual amount of raucous signals. Have a nice contest with a big score. Good Luck!

* * *

THE AMERICAN RADIO RELAY LEAGUE, INC.
225 Main Street, Newington, Conn. 06111

OFFICIAL BULLETIN NR 513 FROM ARRL HEADQUARTERS
NEWINGTON CT DECEMBER 10 1974 TO ALL RADIO AMATEURS BT

The FCC has released its long-awaited Notice of Proposed Rule Making on the restructuring of the amateur service, Docket 20282. The docket provides for a six-month comment period on sweeping proposals for changes in the available classes of license and operator privileges. The amateur frequency spectrum would be divided at 29 MHz into two parts - Part A, or shortwave, and part B, vhf and above. Present licenses would retain most privileges in both parts. Permitted power levels would be redefined based on license class, and in terms of peak envelope power output for the higher classes. The written portion of the Extra Class exam and the exclusive Extra phone allocations would be eliminated, but the expert's code test and exclusive cw segments would be retained. Advanced licensees would be allowed to use any emissions authorized below 29 MHz. General licensees would be limited to A1, A3, and F3 emissions. Novices could use only A1 emission. At vhf and above, a new Experimenter license with a theory exam comparable to the Advanced would permit any emission authorized above 29 MHz. Technicians would be authorized A1, A3, and F3 emissions above 50 MHz. A new Communicator license would permit F3 emission above 144 MHz. The Communicator exam would be comparable to the Novice, but without a code requirement. All classes of license would be issued for five years, but licenses obtained by mail examination would not be renewable except in the case of physical disability. The procedures for examination by mail would be modified to require two licensed amateurs to administer the exam, at least one with a higher-class license than the one being administered. The comment period for these FCC proposals extends until June 16, 1975, with reply comments by July 16. January QST will contain further details. The full text of the FCC Notice is being sent to ARRL elected officials and affiliated clubs. The text will also be sent on request accompanied by self-addressed stamped envelope, free of charge to members and at approximate cost, fifty cents, to others. The ARRL Board of Directors will have this proposal on its agenda when it meets on January 16, 1975. AR

* * *

13.5 VOLT REGULATED POWER SUPPLY
By Jack Power, W2AXU

A regulated power supply is a must these days due to the proliferation of the many solid state FM transceivers for 144 and 220 MHz. For purely mobile operation, no problem exists as the car battery and alternator supplies the power, filtering and regulation. Using the equipment in the house presents the problem, therefore a regulated supply is required since the current load varies from about 200 milliamperes in the receive condition to 2 amperes or so in the transmit condition.

(CONTINUED ON PAGE 6)

13.5 Volt Regulated Power Supply

Continued

The voltage would vary too widely and could make a rather expensive investment useless. The following is a description and circuit for a regulated power supply delivering 13.5 volts at 2 to 3 amperes with adjustable output voltage.

The circuit is as shown in Fig. 1. The parts are readily available at any Radio Shack store or other local radio store handling solid state components.

The supply can be housed in a metal cabinet such as Radio Shack No. 270-253, Callectro No. H4-747 or fabricated from stock aluminum, 1/16 in. material. The pass transistor, Q1, a 2N3055 or equal is mounted on a heat sink, Radio Shack No. 276-1360, Callectro No. K4-680 or the heat sink can be fabricated from 1/16 in. aluminum to suit as shown in the ARRL Handbook. If you fabricate a heat sink, be sure it is large enough to dissipate the heat.

The regulating electronics is made up of a 723 integrated circuit regulator, Radio Shack 276-1740 or 009 (depending on your preference in mounting) and the associated resistors and capacitors. The 0.1 ohms resistor can be made by winding up 8 feet of No. 22 enamel wire. These components can be assembled on perfboard approximately 2 1/2 in. by 3 in. I preferred to use a 14 pin 723 and mount it in a socket. The pot can be the printed circuit board type. The resistor values in their string of resistors are not critical.

The unregulated power supply portion is not critical. A 25.2V at 2 ampere transformer can be used, Radio Shack No. 273-1512 or a Callectro equal. The full wave bridge can be made up of 3 ampere 50 PIV diodes or you can use Radio Shack No. 276-1146, 6 ampere bridge. The unregulated input voltage to the regulator can be anything reasonable above 18 volts but not greater than 40 volts. The V_{in}/V_{out} should be a minimum of 3 volts. The filter capacitor in the output of the unregulated power supply should be at least 3000 microfarads at 40 volts if the 25 volt transformer is used. For other voltages, use 1.4 times the transformer RMS voltage as the minimum working voltage.

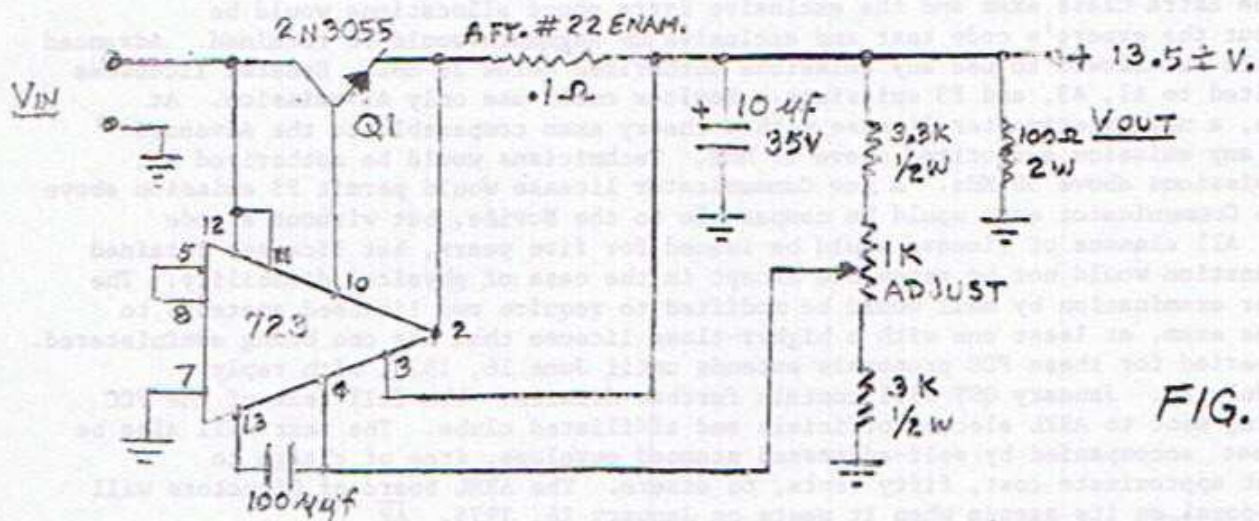
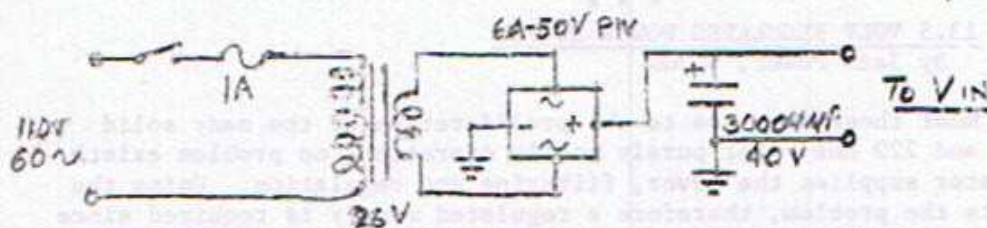


FIG. 1

$$V_{in}/V_{out} = 3V \text{ MIN.}$$



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



AD
MANAGER
K3MKX

ADS

| | |
|---|--|
| <p>NO. 7-9529</p> <p>GEORGE S. VAN DYKE, JR., P.E. DIRECTOR</p> <p>W3HK</p> <p>4502 CONVENT LANE PHILA., PA. 19112</p> | <p>AMERICAN RADIO RELAY LEAGUE, Inc. HARRY A. McCONAGHY, W3SA/W3EFC DIRECTOR, ATLANTIC DIVISION, ARRL</p> |
| <p>EDWARD HARRISON MEMBER, R.F.E. K2MVE</p> <p>POAT OFFICE BOX 228 HADDONFIELD, N. J. 08032</p> | <p>HARRY H. SMITH ASSOCIATES COMMERCIAL AND INDUSTRIAL</p> |
| <p>A request from your AD Manager</p> <p>PROMOTE OUR ADVERTISERS Tell them you saw their ad in CIRCULARS. Leave your QSL card with them.</p> <p>CIRCULARS is one of the best read local media club papers. Circulation - 3000</p> | <p>1 year - \$8 3 years - \$18</p> <p>73 magazine for radio amateurs</p> <p>PETERBOROUGH, NEW HAMPSHIRE 03308</p> |

ham
radio
your most interesting
amateur publications

4th REPORT

Quincy, MA 01906

SWAP SHOP

FOR SALE: B&W 5100B HF AM&SSB Transmitter
HQ 710 Receiver; D-104 mike, new w/PTT stand.
Home Brew 6M/2M SSB Exciter.

All fine condition, Best offer.
CONTACT: Roy Conners, RA. S-1787
Leave message, will return call.

WANTED: Non-Inductive resistor or resistors
to make approx. 700 Ohms at about 35 to
preferably 50 watts for terminating a rhombic.
Also a good used Johnson KW matchbox or equal.
State price and keep it low - hi.

CONTACT: W2HN, Herbert L. Brown
Ninham Rd. Farmers Mills, Rd. 3
Carmel, N.Y. 10512

FOR SALE: 1. Miniproducts vertical antenna
20-15-10-6M - \$25; 2. 5 el. cushcraft 6M beam
\$5.00; 3. 4 el Telrex 6M beam \$5.00; 4. Motorola
T44AAV 450 MHz, Transceiver - \$30.00; 5. Cush-Craft
Zipper Portable Beam: 3 el.-6M & el. 2M \$10.00.

CONTACT: Dennis Silage, WB2LQJ
33 Wardman Ave. Trenton, N.J. 08638
609-883-7122

FOR SALE: 3 el. beam for 10, 15 & 20
meters. Hy-gain model T43-MK2 with ins.
manual. Complete w/all clamps, but one
reflector trap missing. Includes hy-gain
ferite balun. \$10.00.

CONTACT: J.W. Allen, W3CXU
1119 Highland Ave.
Abington, Pa. 19001
215-886-4109

WANTED: 220 Mc. xmtr to run from 8Mc
VFO, 100 watts or so.

CONTACT: J.W. Allen, W3CXU, 885-4109

FOR SALE: 6 mtr. SSB Transmitter, home-
brew, w/VXO & McCoy Golden Filter, \$30.
75A2 Collins receiver w/central elect.
modul & align, crystal calibrator, FM
adapter, manual, \$200; Whippary Labs L11
Lulu 6 mtr. transmitter, VFO controlled
w/AG & DC pwr. supplies built-in \$50;
Clegg 22et FM, w/manual & 5 crys. \$200;
CMU-15 Transmitter on 439.25 for ATV
(No video modulator) \$25; T-44 receiver
strip for ATV checked & working, not
modified, \$15; RCA TV Camera working but
needs lens mount. Compl w/lens & Vidicon
& manual. \$30; 6 mtr Halo \$10; 2 mtr.
squalo \$6. CONTACT: W2MWB, Carl Barish
211 Millbridge Apts. Clementon, N.J. 08021

609-561-5331 day; 609-627-4855 night & Wken



AMIL B. GUMULA
PRESIDENT

A. G. RADIO PARTS CO.
539 TOWNSHIP LINE RD.
ELKINS PARK, PENNA. 19117
TELEPHONE: 215-886-8100

RCM Authorized
Distributor

HOURS
CLOSED MONDAY
TUE. & THUR. 9:00-5:00
WED. & FRI. 11:00-5:00
SAT. 9:00-5:00

(312) 722-1200
312-722-2877

ELECTRONIC EXCHANGE

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

GORDON R. KITTEL
K3AKG

156 N. MAIN STREET
DOUBERTON, NJ 08044

(609) 663-9236

SWEETMAN CALIBRATION SERVICES
ELECTRONIC TEST EQUIPMENT

GERHARD J. SWEETMAN
2672 GLADWYN ROAD
PENNSAUKEN, N. J. 08109

K3KDA

JE 2-4640
4651

LEE A. COHEN

WIPING RAGS
POLISHING CLOTHS
COTTON & WOOLLEN YARNS

CLAYTON L. HASEY & SON
INCORPORATED
4827-51 HEDGE STREET
PHILADELPHIA, PA. 19136

W3CJU

DONALD KRAUT HAMPTON

Jeweler - Watchmaker

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

Phone
Bus. 348-4884
Res. 348-8949

DICK'S PET SHOP
Everything For The Pet

2128 E. 7th St.
PHILA., Pa. 19146

HO 2-8916

LOCUST 7-7130

K3KTY

TRANSPORT EQUIPMENT COMPANY
"Everything for the Truck"

JOHN A. TATE
PRESIDENT

2215 - 2217 RACE STREET
PHILADELPHIA, PA. 19103

Ernest

W3KCN

ERNEST KENAS
TOOL DESIGN
MANUFACTURING ENGINEERING DEPARTMENT

THE BURD COMPANY
AUTOMOTIVE DIVISION

PHILADELPHIA, PA.

WINNERS IN SKYLAB III VHF SPACE NET CONTEST
(OF DECEMBER 7-8, 1974)

Class I

1st K3IPM (WN3WJU) , 26,220 - Mt. Airy VHF
2nd WB20DD 11,152 - Mobile Sixers
3rd W2EIT 7,904 - Mt. Airy VHF

Class III

1st K3VYG 12,920 - Mt. Airy VHF
2nd WA3SFY 9,100 -
3rd WA3RCA 8,192 - Pennate

Class II

1st W3CL 18,392 - Mt. Airy VHF
2nd WA3JMM 15,392 - Mobile Sixers
3rd K3GAS 8,064 - Mt. Airy VHF

Class IV

1st WA3SXY 3,040

CLUB

1st Mt. Airy VHF (K3IPM) 100,204
2nd Mobile Sixers (WA3JMM) 47,216

* * *

W3CL
Harry B. Stein

12-02-74

Dear OM:

Would you please put something in "Cheese Bits" about my stolen rig. I had a SB 144 fully crystaled stolen from my vehicle on the 27th of November which was parked in a bowling alley parking lot in Wilmington, Del. The serial number is 460118. I also lost a company CB set at the same time, both were bolted in my vehicle and were removed with a bar doing considerable damage to the dashboard, seat, instruments and window. I do have insurance and it has been paid but I would like to locate the THIEF if possible, more so than getting the unit back. There is a group in the area that is doing nothing but stealing radio equipment, the proof owch is I had a simpson 260, camera, megger, AC meter and tools, nothing was taken but radios also three other vehicles in the same parking lot were nit. (CB sets). The more people that are aware of this the better change we have of stopping it, but we are all going to have to cooperate and pass on any information we may obtain. If someone does buy this unit cheap, I would like to know from whom they bought it, all help will be confidential and possibly we can stop this. I also think the people that took my equipment thought they had two CB sets so the 2 meter rig could show up any place.

73, Ralph L. Hairsine, K3MPZ
1408 Wedgewood Road
Wilmington, Delaware 19805

NOTE: A new organization called NCIC (National Communications Inventory Control) has been formed to corrolate stolen equipment information. Write to NCIC, 3637 West Grandview Tacoma, Washington 98466.

* * *

AMSAT
RADIO AMATEUR SATELLITE CORPORATION
P.O. Box 27, Washington, D.C. 20044

EXCERPT FROM THE AMSAT 1974 ANNUAL REPORT

March 1974 saw the fifth anniversary of the founding of AMSAT as a non-profit, tax-exempt, scientific corporation. During the past year, membership increased from 1014 to the present 1628 individuals and member societies in 59 countries, a growth of 61 percent. With the establishment of the new class of Life Membership, AMSAT now has over 109 Life Members.

Highlights of Activity in 1974: The primary activities in 1974 centered around AMSAT-OSCAR 6 operations, and the completion and testing of AMSAT-OSCAR 7 in preparation for launch. AMSAT-OSCAR 6 has continued to operate successfully and is now beyond its second birthday. To improve operation over Europe and Africa, a telecommand station was initiated in Morocco (CN 8B0). Other telecommand stations, notably VE3QB, VR2BYG, W6OAL and VK3ZDH succeeded in automating their telecommand terminals. User activity with AMSAT-OSCAR 6 in two years of operation can be summarized as follows: Total number of stations of record completing one or more two-way contacts: 2,854. Total number of countries of record in operation: 87. Total number of U.S. States in operation: 50.

CONTINUED ON PAGE 10

THIS IS YOUR LIFE (THE PACK RATS)
Part #6 "2 and 6 Meter nets are born."

The September, 1957 meeting was held at the Chelton Hills Recreation Center. Due to the change in meeting nite and the Secretary being on vacation, the announcements were not sent out. Members who attended the meeting at W3KKN's were informed of the change in the meeting nite. Since only about 5 members were present, the meeting was adjourned. A rag chew ensued at the Stenton Diner. At the September meeting applications for auto license plate call letters were discussed. W3SAO was instructed to send for applications. The Secretary reported a meeting with WFIL regarding the Boy Scouts. A letter of confirmation from Mr. Kohler was read. Text books and license manuals were purchased and a code oscillator will be purchased in kit form. All the above items to be bought by WFIL. At present 6 members of the club are on 6 meters. A 6 meter project will help to get more members on 6 for the January Contest. At the October meeting the Secretary was instructed to notify members who were delinquent in dues. President, W3OZP requested W3SAO and W3FSC to try and secure a new meeting place and also arrange to have the meeting nite on the 3rd Wed. of each month. It was decided to offer 6 meter converter silver plated brass panels to the members for the sum of \$1.00 to defray the cost of labor and material. W3SAO announced the Pack Rat 2 meter net will be on 144.2 MC each Mon. nite at 8:00 p.m. W3AYG announced that on each Thurs. evening he is conducting code practice on 147.3 MC starting at 8:40 p.m. Various speeds will be sent. At the November meeting the Secretary gave a report on delinquent members. These members were notified in writing of their delinquency. No reply was received from one of the members. A motion was made by W3CPT and seconded by W3CL to take proper action as stated in the Constitution and By-laws. A vote was taken of the membership and the member was removed from the roll. President W3OZP quoted the rules concerning membership and application process according to the Constitution and By-laws. He stressed the fact that if an applicant is blackballed, it is also a reflection upon the sponsors. Personal differences are not considered as reason for a blackball, proof of immoral character is considered a reason. The application of W3WNF, W3ASD and W3HYJ were read. W3HYJ withdrew his application and W3DHH announced his resignation and left the meeting. A motion was made by W3HYO to have secret ballots on all future elections. The motion was seconded by W3CPT. It was defeated by a 9 to 7 count. W3WNF and W3ASD were voted in as members. A report was given on Incorporation and will be taken up at a future Board of Directors meeting. W3OZP gave a discussion on how the Constitution may be changed at any time. It was decided to have a 6 meter net on 50.2 MC on Mon. nite starting at 9:00 p.m. with W3KKN as net control. During a technical discussion period which followed, K3KKN, W3IBH, W3CCX and W3SAO suggested changes and improvements in existing gear. A report was given on the SWR of the Telrex 8 element 2 meter beam. Treasurer's report: Amount on hand \$166.49. Visitors present: W3SOB, KN3BVZ, KN3BHP.

(To be continued)

Frankie Brick, Club Historian

* * *

AMSAT CONTINUED

Total number of OSCAR worked All States trophies awarded: 18. Country with highest number of OSCAR users: United States (1,078) Number of ARRL 1000 Awards issued: 258.
INITIAL PERFORMANCE AND ORBITAL DATA ON AMSAT-OSCAR 7: Given below are initial orbital predictions for AMSAT-OSCAR 7, launched November 15, 1974. Several publications and bulletin stations are serving as sources of AMSAT news and orbital information. (There is no exclusive official source of AMSAT information as implied recently in Ham Radio and HR Reports.) Operating Schedule: Mode A days (two-to-ten meter repeater and 435.10 MHz beacon ON) on odd numbered days of the year, GMT. (For example, Dec. 7 is day 341 and therefore an odd day.) Mode B days (70cm-to-2m repeater ON) on even numbered days of the year, GMT. (For example, Feb. 3 is day 34 and therefore an even day.) Experiment days All Wednesdays, GMT are reserved for experiments, and operation is not permitted even though the repeaters will be on. AMSAT-OSCAR 6 Operating Schedule: Mondays, Thursdays and Saturdays GMT ON for ascending node (south-to-north, evening) passes. Sundays ON for descending node (north-to-south, morning) passes. During weekday mornings, the repeater will

JANUARY VHF SS
UNOFFICIAL PRELIMINARY SCORES
OF THE PACK RATS

| <u>CALL</u> | | <u>CALL</u> | |
|-------------|---------------|-------------|---------------|
| K3ACR | 303-10-12120 | WA3IMT | Not Heard |
| W3AJF | 205-11- 8610 | WB2IOE | Not Heard |
| WA3AQA | 205- 3- 5330 | K3IPM | 535-28-40660 |
| K3AUI | Not Heard | W3ISV | Not Heard |
| W2AXU | No Report | K3IUU | 319-16-16588 |
| WA3AXV | 412-20-24720 | W3IXL | Not Heard |
| K3BOY | 77- 3- 2002 | K3JJZ | 305-10-12200 |
| K3BFP | 310-12-13640 | WA3JSR | 108- 3- 2808 |
| W3BRU | 156- 7- 5304 | WA3JUF | 257-15-12850 |
| W3CJU | 195- 6- 6240 | *WALKIR | 146-14- 7008 |
| W3CL | 321-11-13482 | W3KKN | 509-21-31558 |
| W3CLT | 100- 7- 3400 | W3KM | 32- 2- 768 |
| W3CXU | 159-11- 6678 | K3KMN | Multiop W3KKN |
| WA3DJF | 200- 3- 5200 | WA2KOI | Not Heard |
| K3DLS | M 58- 3- 1508 | K3KTY | 188- 9- 7144 |
| K3DMA | 247- 6- 7904 | K3KUB | Not Heard |
| W2EIF | 369-20-22140 | W3KXH | 40- 2- 960 |
| W3ELX | 233-10- 9320 | K3MWV | 393-18-22008 |
| K3EOD | 160- 5- 4800 | WA2MWB | 20- 2- 480 |
| K3EPB | 169- 9- 6422 | K3MXM | 206- 6- 6592 |
| WA3EPS | 120- 4- 3360 | WA3NFV | 108- 2- 2592 |
| WA3EPS | AM 11- 1- 242 | WA3NGK | 315-13-14490 |
| K3ESL | Not Heard | K3NMN | 133- 4- 3724 |
| K2EVW | 56-12-1364 | W3NSI | 129- 3- 3354 |
| W3FGQ | Not Heard | K3OBY | 7- 1- 154 |
| WA3FOF | 235-10- 9400 | K3OPC | Not Heard |
| W3FQD | 126- 6- 4032 | WA3OVH | 268- 3- 6968 |
| K3GAS | 235- 8- 8460 | W3PST | No Report |
| W3GEW | 207- 5- 6210 | W3YXU/3 | No Report |
| W2GGB | 52- 2- 1272 | WA3PUL | 246-12-10824 |
| W2GIA | 130-11- 5460 | W3QB | No Report |
| K3GOZ | 196- 3- 5096 | W3RZU | Not Heard |
| K3GQJ | No Report | W3GAO | 184- 5- 5520 |
| W3HFY | 347-16-18044 | W3CCX | Not Heard |
| K3HIN | 120- 4- 3360 | W3SMK | Not Heard |
| *WA3HIT/8 | No Report | WA3SPR | 180- 4- 5040 |
| W3HK | 219- 8- 7884 | WB2SZK | Not Heard |
| W3HKZ | 30- 2- 720 | *WA2UUV/6 | No Report |
| W3HMU | 440-20-26400 | *K4UV | No Report |
| W3HQT | 455-23-30030 | K3VEQ | No Report |
| K3HSS | Not Heard | K3WGI | Not Heard |
| *WA2HVD/9 | No Report | W3YXF | 145- 9- 5510 |
| WA3HVL | 111- 3- 2886 | K3ZKO | 9- 2- 216 |
| W2HX | 50- 4- 1400 | W3ZD | 410-21-25420 |
| WA3IDQ | 148- 4- 4144 | W3ZRR | Deceased |
| K3IGX | 221- 4- 6188 | K3ZSG | 376-20-22560 |

*Outside Area

TOTAL 565,760

This 1975 ARRL VHF Sweepstakes, participated in by the Pack-Rats, is dedicated to the memory of departed member and friend W3ZRR - Raymond H. Whitehead.



BICENTENNIAL AMATEUR RADIO CONVENTION COMMITTEE
ARRL ATLANTIC DIVISION CONVENTION
BEN FRANKLIN HOTEL - PHILADELPHIA
JULY 23, 24, 25, 1976



NEWSLETTER III

DECEMBER 16, 1974

- DIRECTOR, ATLANTIC DIVISION
Harry A. McConaghy, W3SW
- CHAIRMAN
Dave Zimmerman, W3ZD
- VICE CHAIRMAN
Harry Sosis, W3CL
- TREASURER
Dr. Zaidore Calder, K3GAS
- RECORDING SECRETARY
Joan Strickland, W3JNT
- CORRESPONDING SECRETARY
Peter Shavney, W3OVH
- SOUTHWEST DIRECTOR
(DELAWARE COUNTY)
Paul D. Mercado, W3FBF
- NORTHERN SUBURBI DIRECTOR
Kenneth J. Slater, WA3RYD
- CENTRAL PHILADELPHIA DIRECTOR
Elwood Halderman, W3PST
- UPSTATE DIRECTOR
Alan R. Brainer, W3ZRQ
- CENTRAL NEW JERSEY DIRECTOR
George C. Ford, Jr., K2QJ1
- NORTHWEST DIRECTOR
(CRESTNUT HILL)
Abraham Rubin, W3HRW
- NORTH NEW JERSEY DIRECTOR
Charles M. Simpson, W3ZEE
- SOUTH NEW JERSEY DIRECTOR
Ken Miller, W2KFP
- NORTHEAST DIRECTOR
(LOWER BRUCKS CO.)
William H. Cypwicko, W3UAX
- YL DIRECTOR
Carolyn B. Curran, W3GTC
- QCWA-DELAWARE VALLEY CHAPTER
John Wolf, W3IMU
- DE CHAIRMAN
Ben Schaeffer, WA3ATP

The fourth dinner meeting of the Bicentennial Amateur Radio Convention Committee, sponsors of the 1976 ARRL Atlantic Division Convention, met at the convention site, the Benjamin Franklin Hotel in Philadelphia, the evening of September 24, 1974.

Thirty-eight delegates and guests were present including the Atlantic Division Director, W3SW and the Vice Director, W3KT. The meeting was chaired by Dave Zimmerman, W3ZD who called upon the various activities chairmen for progress reports.

WA3PZO was approved as the chairman of the public relations committee and will be assisted by W3PST, WA3BKR and W3HK. K3ACR resigned as corresponding secretary because of pressure of other business. His resignation was accepted with thanks, and WA3OVH was approved as the new corresponding secretary.

WB2DBA was introduced as the official photographer, and he took a number of shots for the historical record.

K3ZQN discussed MARS participation and suggested three individual exhibits.

K3GAS, the treasurer, reported a balance of \$1,108.99. He stated that the Haverford Township Emergency Net and the Frankford Radio Club were additional bond purchasers.

It was requested that W3PST ask the Philmont Club to apply for the special convention call sign, WM3PEN to gap the convention period.

The contest for QSL cards has a number of entries and a vote for the best one will be held at the next meeting.

W3ZD is still anxious to receive preliminary budget requirements from the various committee chairmen.

The formal meeting was concluded with a walk-thru of the hotel facilities.

The next meeting of the Board of Directors and delegates will be held on Tuesday evening, January 28, 1975 at the Casa Conti in Glenside, Pa.

During October and November special meetings of a number of committees were held with either the Chairman and Vice Chairman in attendance or both.

The chairman of the exhibits committee W2KF, Ken Miller requests from the delegates suggestions for names of possible exhibitors.

W3FBF, Paul Mercado, conducted a special meeting of the Banquet Committee at the Valley Forge Hilton.

There were two special meetings of the QCWA, Delaware Valley Chapter, called by the chairman, John Wolf, W3IMU.

The contest committee reports progress and Pete Shavney the chairman requests that a spot at the banquet be reserved for the awarding of prizes for the "Home-Brewers".

Chairman Dave Zimmerman, W3ZD attended a meeting of the Penn-Jersey YL's where Carolyn, W3GTC the YL Director outlined YL activities plans and requested a hospitality suite be provided for their use. Hospitality suites are available to organizations for a nominal fee. A number of groups have already applied, and if your club is interested get in touch with W3ZD.

The program is gradually being shaped up, so if you have good ideas, please contact Program Chairman, Harry, W3CL.

The officers and directors of BARRC wish all of you a HAPPY HOLIDAY SEASON.

be on over the USA on even numbered days for education bulletins only and not for general use. Operation is not permitted at other times, even though the repeater may be on. QSL cards for AMSAT-OSCAR 7 have recently been donated by K5RZU and the Hesse Envelope Co. and are now available in return for your A-c 7 report.

DONATIONS NEEDED FOR THE AMSAT-OSCAR 8 PROJECT: Amsat is trying to raise \$15,000 needed for the development of advanced hardware for the AMSAT-OSCAR 8 project. Currently under development are 146-to-435 MHz repeaters, new telecommand and telemetry systems, and on-board microprocessor controlled systems for applications in future AMSAT-OSCAR spacecraft. Additionally, AMSAT is in danger of running a deficit of \$6,000-10,000 due to the increased scope and costs of our activities. If at all possible, won't you help by sending a donation today. U.S. contributions to AMSAT are tax-deductible under Section 170 of the Internal Revenue Code. A donation of \$100 or more will bring you an AMSAT-OSCAR 6 and the new AMSAT-OSCAR 7 pin in recognition of your support of AMSAT's amateur satellite program. Thank you for your help. 79, Perry I. Klein, K3JTE, President

* * *

WA6LET (SRI) AMATEUR RADIO SOCIETY MENLO PARK, CALIF. 94025

You are invited to participate in a 432/144 MHz moonbounce test from WA6LET at the SRI 150 ft dish on February 22-23, 1975. This letter is being sent 2 1/2 months in advance so that you may have time to make preparations. We plan to operate two separate stations at the same time, and it will thus be necessary to hold to a common transmit-receive schedule. We will transmit the first 30 seconds of each minute and listen the second 30 seconds. Interference from stations calling out of sequence and on the same frequency we were transmitting was severe on the East coast of the USA and in Europe during the tests on 144 MHz last May. To avoid this problem, we intend to operate split-frequency transmitting near 144.190 and 432.190 MHz and receiving 70 kHz or more down the band. We are presently scheduling two five hour operating periods, from 0500-1000 UT on 22 February, and 0000-0500 UT on 23 February. During the former period (Friday night and Saturday morning local) the moon will be setting over the Americas and rising over Australia and Asia. During the latter period (Saturday evening local), the moon will be setting over Europe and Africa. The 144 Mhz test is primarily intended for the benefit of those stations who were unable to contact us last Spring. Suggested frequencies for stations wishing to call us are 144.100 plus or minus up to 20 kHz for SSB and CW respectively, and 432.100 - 20 kHz. The operating period 0000-0400 UT is primarily intended for stations in Europe and Africa, and those U.S. stations with fixed antennas pointed in the European "window." We will also attempt to conduct low-power one-way tests near the even hour, in which a preamble will be sent announcing the test, the power will be changed, and a Morse code group will be repeated over and over for 15 seconds, followed by another change, etc. The changes may be either a decrease or increase in power or a change in polarisation. Please send us the next week (e.g. postmarked by 28 February) a copy of what you received, and we will send you a SWL card listing the lowest power level at which you were able to copy the code groups correctly. Facilities for the test are being made available courtesy of SRI's Radio Physics Laboratory and Ionospheric Dynamics Laboratory. The equipment will be operated by members of the SRI amateur radio society (WA6LET) and the UHF radio society (W6GD).

TMO CODE

T signals detected
M letters or portions of calls copied
O both calls and report copied
MT nearly solid copy
RRR confirmation of reception
If signals are strong enough use standard
RST report and RRR for confirmation.

Address and Reply To:
Victor R. Frank
Stanford Research Institute
Building 320A
333 Ravenswood Avenue
Menlo Park, California 94025
USA

