

PACK RATS'

**CHEESE
BITS**



PACK RATS

CLUB CALL: W3CCX

MT. AIRY VHF RADIO CLUB, INC.

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

AFFILIATED CLUB: AMERICAN RADIO RELAY LEAGUE

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

VOLUME IV

AUGUST 1970

NUMBER 8

OUR PREZ SEZ

THE PAST YEAR

Many thanks to all of you for cooperating for a fun filled, active year. All the help sure made it great. The program boys made every meeting an event. The special events chairmen proved that selfless dedication to club welfare can win a sweepstakes, run a fantastic field event during the QSO party, have a ladies nite we'll not forget, a pleasurable club picnic, etc. etc.

The steady guys who run raffles, provide refreshments, run auctions, hamtr hunts, cheez-bits, and its contributors, antenna measuring parties, club projects; all these people are the back-bone of the club. For what more could a President ask.

On a sad note is the passing to silent keys of some of our good members. We'll miss them. However, welcome to the new members, they are an enthusiastic asset to the club.

Continued on page 10

DEADLINE FOR ARTICLES IN THE GENERAL MEMBERSHIP MEETING.

DIRECTORS:

EDITOR:

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

K3KTY, JOHN TATE
K3MXM, LEE COHEN
WA3LNH, CHARLES BENAVIDES
K3UJD, MARIO FONTANA
K3BPP, WALTER BOHLMAN
K3CIV, RALPH HERSH
(Ex-Officio)

* * * * *

TRUSTEE OF CLUB CALL: W3CCX

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

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WA2KOI, LLOYD SCHOENIG
027 WOODLAWN AVENUE
COLLINS LAKE, N.J. 08094

ARRL BULLETINS

AWARDS CHAIRMAN:

W3EIF, JOSEPH KILGORE
#5 SYNNYBROOK COURT
STRATFORD, N.J. 08084

NR 278, JUNE 25, 1970

New horizons in amateur radio will be opened through Oscar 6, now being planned by Amsat, the Radio Amateur Satellite Corporation. The satellite is to have an active life time of one year or more and will be usable by relatively unsophisticated amateur stations for DXing, contests, traffic handling, etc. You can take an active part in this exciting amateur program through membership in Amsat. Both club and individual memberships are available. For full details, write the Amsat Membership Committee, Post Office Box 27, Washington, D.C. 20044 AR.

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

MONDAY NIGHT NETS:

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

OFFICERS - 1970-1971

PRESIDENT: K3JJZ, ELLIOTT WEISMAN
VICE-PRES.: W3CJU, DONALD HAMPTON
TREASURER: K3GAS, DOC CUTLER
CORRES. SEC.: W3SAO, FRANCIS BRICK
SEC. SEC.: WA3BIV, CARL BARISH

Continued on page

CALENDAR OF COMING EVENTS

Syllabus by Lee, K3MXM

AUGUST

- 9 PACK RAT ANNUAL PICNIC - ALL DAY SUNDAY - Fort Washington State Park, Flourtown, Pa.

One of the high spots of the yearly program. Check your picnic equipment. Put a ring around the date. Meet your SCM and Atlantic Division Director - they both have been invited.

Talk in on 50.2 and 145.2 Mhz. Plenty of signs along Route 309, The Expressway, The Turnpike and throughout the area. LOOK FOR THE RAT!

Games for the kiddies, games for the adults - see who gets the egg - this year - New type Micro Miniature Transmitter Hunt - Prizes - Drawings - Free Soda -Plenty of Rag Chewing - Plenty of Eyeball QSO - A real good day for the whole family.

Visitors and Friends more than welcome.

Talk up the picnic on the nets and with your contacts.

- 12 Board of Directors Meeting - QTH - W3CJU - Don Hampton, 500 East Court Street, Doylestown, Pa. 8:00 P.M.

- 19 Second Outdoor Meeting -SOCIAL NITE - QTH - K3IUV, Bert Soltoff, 961 Warfield Lane, Huntingdon Valley, Pa.

XYL's -GF's and YL's definitely invited.

A social nite in the country - See Frankie - W3SAC get his annual dunking. See where the 1296 dish is stashed. See ole time slides and comments by our own WRCL.

SEPTEMBER

- 9 Board of Director Meeting.

- 13 SOUTH JERSEY RADIO CLUB HAMFEST, Mclia Farms, Malaga, N.J.

Continued page 4

CALENDAR OF COMING EVENTS (CONTINUED)

September

14 - 18 Radio Amateur Week in Pennsylvania by Governor Schaffer Proclamation.

Many exhibits and displays throughout the city and state. One of the larger ones will be at the McDade Mall in Glenolden, Pa.

Army, Navy and Air Force Mars will have units in action. Traffic will be taken and passed. Teletypes will be connected directly to Washington. There will be a fly-over.

A model ham station will be in operation.

Further details from WA3GNV - John Ellmore.

16 THE PACT RAT CLUB AUCTION

The affair we have been waiting all year to attend. A good chance to clean-up that junk box and also to refurnish it with a newer mixture.

The more the merrier. Invite everyone - other hams, other clubs, novices and we will even let a few CB'ers in..

QTH -W3ZD - Dave Zimmerman - 520 Centennial Road, Warminster, Pa.

Full directions and driving details with map next issue.

COMING HAMFESTS

York County, Gaithersburg, Virginia, Winchester, August 1 and 2, 1970.

Nine months to go - 15th Anniversary Dinner - Buck Hotel, May 8th, 1971.

DID YOU KNOW

WA3NFV, Dan Mitten, will give everygody a frequency check on the six meter net, as soon as he learns how to operate his frequency meter.

FROM THE BOOK RACK

Paul R. Behrmann, K3WEU/AREA*

64 HOBBY PROJECTS FOR HOME & CAR, written by Robert M. Brown and Mark Olsen, Publisher - Tab Books #487
192 pages, profusely illustrated - \$6.95 hardbound; \$3.95 paperbound

Here's a guide to building dozens of practical electronic projects for use around the house and on the car . . . a variety of gadgets bound to please almost everybody - from the hobbyist to the engineer who likes to get into the thick of things! From an auto ice alarm to a vibrator rejuvenator, from an amazing electric candle that lights with a match to a splash alarm for the swimming pool, there's a host of fun-to-build devices, many of which are quite unique. Some are simple, while others are more involved; some can be put together in less than an evening, while others offer more of a challenge.

For the home, there are 28 individual projects, for the car a total of 36, each accompanied by explanatory text where necessary (enough to help the reader iron out the kinks), plus a complete schematic and/or pictorial diagram and parts list.

Here's a fine collection of practical projects with everything worked out except the fun!

Partial Contents include: Garage Light Control - TV Commercial Extinguisher - Lawn Sprinkler Control - Low-Voltage Closet Wiring - Liquid Level Control - Remote TV Switcher - Electronic Tach - Wake-up Alarm for Sleepy Drivers - Safety Flasher - "Fox Hunt" Transmitter Sniffer - Idle Speed Calibrator and Tach - VOM - Dwell Meter Converter - Soldering Gun for Car - Accurate Miles-Per-Gallon Meter.

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*Amateur Radio Editors Association

ARRL BULLETINS CONTINUED

NR 280, JULY 9, 1970

FCC on July 1 acted on its Docket 18802, adopting a new schedule of higher application and license fees. This action was taken despite strong protests from nearly every radio service. For example, the ARRL opposition statement appears on page 80 of June QST. The new fee schedule becomes effective August 1, and is as reported on page 82 of April QST AR.

THE YOUNGER GENERATION'S CRY TO THE "OVER THIRTY" GENERATION:

"GIVE US PEACE, LOVE, TOLERANCE AND UNDERSTANDING. PRACTICE WHAT YOU PREACH!"

It seems that they forgot to "Practice what they preach" at the United Nations World Youth Assemply. Instead of Peace, Love, Tolerance and Understanding a number of them walked out in a huff.

Here was their chance to prove to the "Over Thirty" generation that they could handle World Affairs better. They only proved that the "Younger", "Over Thirty," and "All" (past and future) Generations are faced with the exact same dilemma.

"Peace, Love, Tolerance and Understanding" do not belong to any generation; they belong to YOU, the individual, and the sooner YOU learn to practice them the sooner the world will be a better place to live in together.

"Mother Rat"

Helen Brick
XYL, W3SAO

A very interesting booklet called "Conversion Factors and Formulae" can be obtained from Centralab-Division of Globe-Union, P.O. Box 591, Milwaukee, Wisconsin 53201.

GUESTS AT THE JULY MEETING

K1SFF/3	Tony	Ottsville
W3HNP	Roy	Philadelphia
K3JJO	Wally	Willow Grove
WA3HGX	Vince	Flourtown
WA3KPP	John	Philadelphia
K3WJB	Drew	Philadelphia
WA3FDW	Pat	Rockledge
K3OZB	Bill	Dresher

MEMBERSHIP

New Member - W3YXF - JOE RUSHTON
STAR ROUTE 2
DOYLESTOWN, PENNSYLVANIA

A SIMPLE 2-METER RIG

WB2SZK RANDY BYNUM

Lately there has been a trend for hams to move up to two meters for one reason or another. Since this involves many of the club members, I would like to provide the fellows with something which will make it very easy to get on two meters with the least amount of cash, yet still offers a small, neat transmitter of respectable power on two meters. (20 Watts is respectable is'nt it?)

The transmitter described here is used at WB2SZK to drive a higher power final but could be used barefoot, providing somewhere in the neighborhood of 10 watts output.

Although I didn't claim anything really original here I know the circuit works, and works well.

The lineup starts with a simple modified Pierce oscillator (6CL6) which also is used as a multiplier for crystal operation or as an amplifier for VFO operation. (I have used 6 and 8 mc. crystals and a 24 mc. VFO, with slightly more drive from the VFO.) This in turn drives another 6CL6, tripler, to 72 mc. output, then being doubled in the 7558 stage (5763 tried but less grid drive) to 144 mc. The 144 mc. energy is coupled to a straight through 6360 power amplifier.

If this transmitter is not used to drive a high power final, I would suggest installing a series tuning capacitor in the ground return lead of link L₅ to tune out any reactance in the transmission line. I left it out because one is contained in the grid return of the final and there seemed to be some interaction.

Construction is not particularly critical as long as good VHF construction techniques are employed, (short leads, good quality bypasses, etc.). The transmitter may be built on a 4x14" chassis with plenty of room. This allows all tubes to be kept on a straight line, thus keeping mutual coupling to a minimum.

The transmitter requires only 6.3VAC for the filaments and approximately 300VDC for the B+. If plate modulation is to be used the final plate and screen lead may be run through the secondary of the modulation transformer. It will require about 10 watts of audio.

This transmitter was very simple to build and get going once the correct tubes were used to provide enough drive for the 6360. (about 2 -3 ma. total).

WB2SZK, Randy

SWAP SHOP

Conducted By: W3ZRR, Ray Whitehead
7329 Shelborne St.
Phila., Pa. 19111
215 - RA 2-4786

FOR SALE

- ANTENNAS -- 50MHZ, 144MHZ,
220MHZ and 432MHZ.
1. 50MHZ - 2 Telrex, 5 element optimum spaced Yagis Model 6M-516 - All stainless steel hardware \$18.00 each
 2. 144MHZ - 1 double 8" J -Beam" Yagi with balun. \$15.00
 3. 220MHZ - 2-16 element collinear by Cushcraft. All stainless steel hardware -teflon insulators for driven elements. \$13.00 each.
 4. 432MHZ - 2-16 element collinear by Cushcraft all stainless steel hardware - teflon insulators for driven elements. \$8.00 each.

CONTACT: W2AXU, Jack Power
25 Van Duyn Drive
Trenton, New Jersey
1 - 609 - 882 - 1040
* * *

FOR SALE

1. Lambda Model C281 D.C. Power Supply - 125 to 325 Volts D.C. 200 ma. output./ 6.5 Volts A.C. at 10 Amp Filament Supply.

FOR SALE CONTINUED

2. Lambda Model #29 D.C. Power Supply - 100 to 200 Volts D.C. at 100 ma. output./ 6.5 Volts A.C. at 3 Amps Filament Supply.
3. Heathkit Apache TX-1 Transmitter - 180 W CW, 150 W AM Phone, 180 W. PEP SSB (with adapter); excellent condition, new 6146 finals, original manual - guarantee for 30 days.
4. Misc.-Homebrew T.R. Switch, identical to E.F. Johnson Model #250-39, provides 2-6 db gain on receive (3-30MHZ), up to 4 KW PEP input.
-Vibroplex "Champion" model semiautomatic key.

Contact: Bob Eisenberg, K3IPA
540 Steven Dr. Apt. 102
King of Prussia, Pa.
19406
215 265-5694
* * *

FOR SALE - From Estates of our Deceased Members:
AMECO TX 62 - D104 mike-nuvisiter converter with power supply ARC 5 VRO with power supply-Dow Key Relay. \$140.00

Heathkit Seneca \$ 70.00

Continued on page

2 METER REPORT

The two meter band has had some good openings during the first part of July with W1YTW in Maine putting in a very strong signal on SSB at 144.11. on July 1. There was an excellent opening to the N.E. of Philadelphia with VE1AFB, K1YTW, and numerous stations in Eastern Massachusetts and Vermont. Signals were good all the way thru 1296 MHZ as evidenced by Bert, K3IUV, working W1GAN on 1296. W1GAN is in Salem, Massachusetts, north of Boston. An aurora was also noticed earlier the same evening with some contacts to the mid-west reported.

W2EIF, Jo.

OUR PREZ SEZ (CONTINUED)

I feel the club has reached a high peak of activity and mutual help. The club is financially secure, it has reaffirmed its integrity and is morally strong.

Again thanks to all for the help, continue it for the new regime. Volunteer, lighten their load. Thru it all have fun. I did the past twelve months, I hope you did also.

Ernie Kenas - W3KKN

Ghost Writers: Rest in Peace.

EDITORS NOTE

Due to timing problems the above message was not included in the last Cheese Bits. It is printed here because a message of this stature cannot be overemphasized.

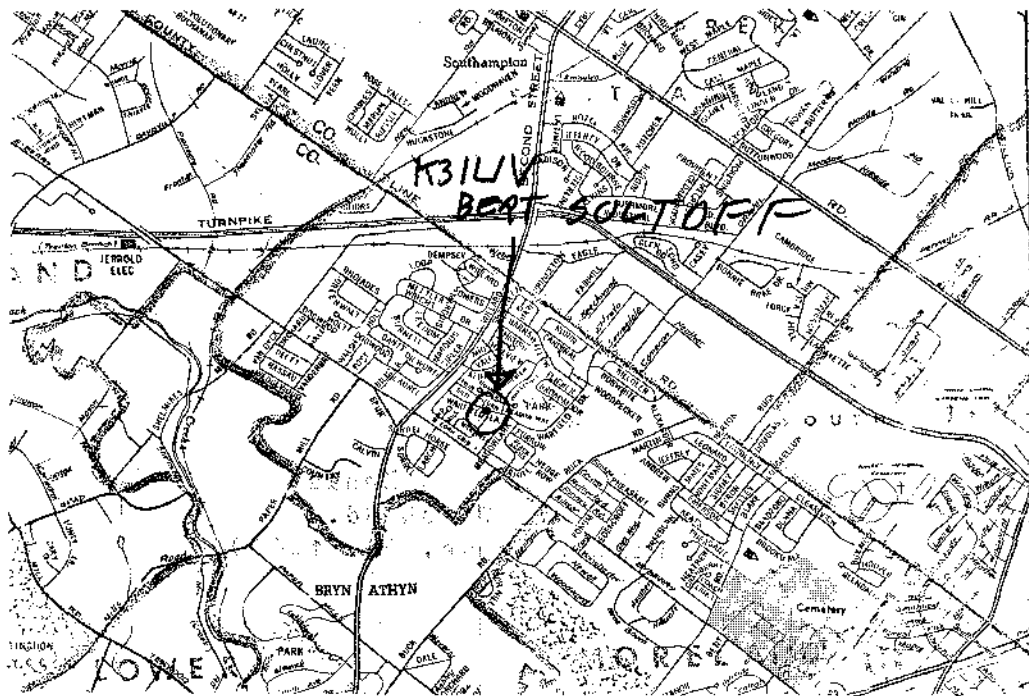
As Ernie said, it was a great year, and a fun year and you made it that way. As your new President, the only thing I can ask is keep it up.

K3JJZ - E1

SWAP SHOP CONTINUED:

6 meter homebrew Xmtr and modulator-homebrew converter with power supply-Turner +2 mike-Arc 5 VFO all power supplies,	\$60.00
6 meter SSB exciter-amplifier pr. 6146's-VFO-all power supplies,	\$65.00
Power supply with 5 position switch	\$ 5.00
6 meter SSB Venus and Appollo-Heath HB10 power sup-Clegg,SSB Booster-Turner SSB mike	\$425.00
6 and 2 meter transmitter, Heath Seneca with manual	\$75.00
Tape Machine TG 10 with box of 14 tapes	\$25.00
6 & 2 meter International converters and power supply built in rugged case. 7-11 IF.	\$25.00
90 Good tubes includes 5-6146., 4-1625., 12AT7's., 12AU7's., 2E26's., 6AL5's., 6U8's., 6BA7's., 12AX7's., 6BU8., 6GM6., etc.	\$12.00
Hallicrafter HT 40K Transmitter-80 thru 6 AM & CW	\$25.00

FOR INFORMATION, CALL K3GAS, DOC CUTLER, ME 5-1078



HARRY STEIN

W3CL

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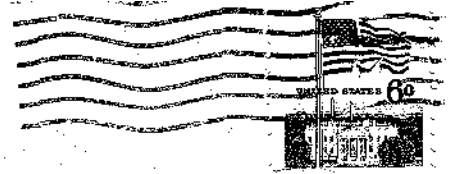
K3BPK

6318 Roosevelt Blvd
 PHILADELPHIA, PA 19149

Telephone (215) CU 8-0280

<p>morton d. mazer WA3EPS REAL ESTATE 1008 E. WADSWORTH AVENUE PHILADELPHIA, PENNA. 19105 (215) CH 6-1662</p>	<p>OLDFIELD 9-4440  RESCO ELECTRONICS A Division of Avtron, Inc. <i>Radio Electric Service Co. of Pa.</i> DISTRIBUTORS OF ELECTRONIC EQUIPMENT EUGENE CASTROVILLO 29 YORK ROAD MANAGER WILLOW GROVE, PA. 19090</p>	<p>K3MXM JE 3-4660 4661 LEE A. COHEN CLAYTON L. HADY & SON INCORPORATED 4527-31 HEDGE STREET PHILADELPHIA, PA. 19134 WIRING, RAGE POLISHING, DYEING COTTON & WOOLLEN WASTE</p>
<p>LOcust 7-7130 K3KTY TRANSPORT EQUIPMENT COMPANY <i>"Everything for the Truck"</i> JOHN A. TATE 2215-2217 RACE STREET HOME PHONE: OR 3-8840 PHILADELPHIA, PA 19103</p>	<p> PHONE: 662-6114 BARRACKS TRADING POST Camping - Electronics Canvas RT 38 of RUDDEROW AVE., MAPLE SHADE, N.J. HARVEY PRIMOST</p>	<p>BEN SCHAEFER (215) 449-2300 WA3ATP KASS ELECTRONICS DISTRIBUTORS DISTRIBUTORS OF INDUSTRIAL ELECTRONIC PARTS & EQUIPMENT RADIO TELEVISION PRODUCTS 2502 TOWNSHIP LINE ROAD (WEST OF ANDSDOWNE AVE.) DREXEL HILL, PA. 19026</p>
<p>ECI EDGEMONT COMMUNICATIONS INC R D #1 - BOX 196 NEWTOWN SQUARE PA 19072 JONATHAN B. BALCH PRESIDENT TELEPHONE 366-4444 AREA 218</p> <p>RF COMMUNICATIONS CONSULTANTS COMMUNITY REPAIRERS TOWER MANAGEMENT FREQUENCY COORDINATION SPACE RENTALS</p>	<p>PIONEER 4 2626 - 27 WA3JSR - BEN G & G Metal Products STEEL FABRICATION - FORMING AND STAMPING SPOT WELDING - ARC WELDING 1709-15 GILLINGHAM STREET PHILADELPHIA 24, PA.</p>	<p> A. G. RADIO PARTS CO. 717 TOWNSHIP LINE, ELKINS PARK, PA. W3BHR 6896 TU 6-9100</p>

Pack Rat Cheese Bits
 8533 Algon St.
 Phila. Pa., 19152



PACK RATS

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

FIRST CLASS MAIL

MEETING NOTICE

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80 N. YORK ROAD WILLOW GROVE PENN 19090

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<p>PHONE PATCH SMALL, COMPACT</p>  <p>14⁹⁵</p>	<p>RG8 LOW LOSS COAX</p>  <p>100 Ft. 11.88</p>	<p>Model 531</p>  <p>ASTATIC 531 AM/SSB REG. PRICE 12.75</p> <p>6⁹⁹</p>	<p>METER TYPE INDICATOR</p>  <p>C-D-R (CORNELL-DUBILIER) ANTENNA ROTATORS HAB-M ANTENNA ROTATOR</p> <p>99⁹⁵</p>	<p>6146 TUBE</p>  <p>3⁹⁹</p> <p>BRAND NEW, NATIONAL MFG. FACTORY CARTON, GUARANTEED</p>	<p>D104 G GRIP-TO-TALK DESK STAND</p>  <p>25.</p>	<p>24 HOUR</p>  <p>\$16</p>	<p>STORE HOURS</p> <p>MON - FRI - SAT 9.30 TO 5.30 TUE - THURS 9.30 TO 1.30 WED - 9.30 TO 9PM</p>	<p>GRIP-TO-TALK DESK STAND</p>  <p>12⁹⁵</p>