

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, 9 47 E. STREET ROAD

SOUTHAMPTON, PENNSYLVANIA

VOLUME XVII

MAY, 1975

NUMBER 5

THE PREZ SEZ

The April general membership meeting featured a fine talk and slide presentation by Nat Schnoll, W2PN, on the subject of the AMSAT OSCAR Satellite projects. I think we were all made more aware of the tremendous effort that went into making amateur satellite communication a reality, and perhaps more importantly the cooperation between amateurs of many different countries that was required to produce the satellites. We thank Nat and his wife Ida for making the journey to our meeting and hope to see them sometime real soon.

June Contest season is fast approaching. The creel limit for contacts and sections is only limited by the skill and cunning of our key-operators. Barbless antennas must be used so that we may throw them back unharmed for next year. Towers of greater length than 100 feet will not be used so as not to be considered unsporting. The season runs for only two days this year, June 14 and 15, however much help is needed to dig for worms on Friday and to help clean the catch on Monday. Game warden Bill, W3HQT, has permits which will allow use of all facilities for the entire weekend. In addition, you will be provided with the finest equipment and a privately stocked stream just loaded with slippery contacts. Who knows maybe we can talk about the one that didn't get away.

The May meeting is our annual ARRL Night. The speaker for the evening will be Lew McCoy, W1ICP, Editor of the Novice Column in QST. We are indeed privileged to have a representative from Headquarters make the long journey to our meeting. We are looking for a large turn-out of not just our own members, but members of other clubs in and around the Delaware Valley. In addition to Mr. McCoy, there will be other league officials present including Harry McConaghy, W3SW, Director of the Atlantic Division. So spread the word and come out for what should be a most interesting meeting.

In addition, the May meeting will present the nominating committee's slate of officers for next year. Nominations will be open from the floor for additional candidates. Please obtain permission from your candidate before nominating. Nominations will also be open in June preceeding the voting.

This months cryptogram should separate the men from the boys:
TMDDUQP TMDDK TMXR-TQMDPQPM TMIWQP TUE TAYQNDQI TMDYAZUOME.

73 Ron, WA3AXV

Solution to last month's crypto: If you can't resistor perhaps you can inducer.

Harried Harry half-heartedly hawked his homebrew harmonicas.

PACK RATS' CHEESE BITS IS A PUBLICATION OF THE MT. AIRY V.H.F. RADIO CLUB, INC. PHILADELPHIA, PA. AND IS PUBLISHED MONTHLY.

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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.

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W3CL, HARRY B. STEIN
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GLENSIDE, PA. 19038

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215 ES 9-5338

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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
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CORRES. SEC.: WA3NGK, HARRY BROWN
REC. SEC.: WA3DJF, CARL MATTIACE
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K3ACR, RICH PATTISON
WA3JUF, 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.	W3HMU

FRIDAY NIGHT ATV NET:

		<u>NET CONTROL</u>
439.250	7:00 P.M.	K3ZKO/WA3AXV

PACK-RAT REPEATER - (WR3ACD)
CHURCHVILLE, PA.
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APPOINTMENTS:

DOCKET NO. 20282 STUDY COMMITTEE
W3KKN - CHAIRMAN
MEMBERS - W3CL, W3FQD, WA3NFV, WA3AXV,
W3HMU, K3IUV

TO GET YOUR FREE COPY OF THE MUCH DIS-
CUSSED DOCKET #20282 WRITE:
EFC - WASHINGTON, D.C. 20554

JUNE 1975 VHF QSO PARTY CHAIRMAN -

W3HQT, BILL OLSON

ARRL'S "INSURANCE GUIDE" (CD-82) HAS BEEN RECENTLY REVISED TO PROVIDE MUCH VALUABLE UP-TO-DATE INFORMATION TO HAMS. IF YOU HAVE HAM GEAR OF CONSIDERABLE VALUE, IT ADVISED A "RIDER" TO YOUR MAIN POLICY (AT A COST OF AROUND 2% -5% OF THE STATED VALUE) AND A SEPARATE "FLOATER" FOR YOUR TOWERS AND ANTENNAS. GROUP POLICIES FOR CLUB ACTIVITIES ARE DISCUSSED. IT PAYS FOR SURE. WRITE FOR ARRL'S CD-82 TODAY.

CALENDAR OF COMING EVENTS

Syllabus by Lee, K3MXM

MAY

- 2-4 West Coast VHF/UHF Conference - San Diego, California (Harbor Island Sheraton Inn)
- 4 Delaware Valley ARC- Flea Market and Auction 10 A.M. till 3 P.M. Auction starts at 1 P.M. Grand Prize TR-22C - Ewing Post VFW, Green Lane, West Trenton, N.J. (Same place as last year) Admission \$1.00 advance - \$1.50 at door.
- 4 Potomac Area Hamfest - Warminster, Md. Agriculture Park. Sponsored by Potomac Area VHF Society - Prizes, games, eye-ball QSO's 146.52 or 146.94 talk-in K3LNZ.
- 14 Board of Directors Meeting -QTH W3YXF, Mr. Joe Rushton. 107 Rosewood Drive, Lansdale, Pa. If lost Phone 855-7799. Directors and interested parties invited.
- 15 General Club Meeting - ARRL Nite - Special Guest Speaker, Mr. Lew McCoy, WLICP. Editor Novice and Beginner Column. QST. Meet the speaker dinner at 6:00 P.M. Buck Hotel, Feasterville, Pa.
The MARIO RAFFLE - DOC'S SILENT AUCTION - Refreshments.
Club members, other club members and friends are cordially invited.
- 17 MARS/ARMED FORCES DAY. Exchange special messages with the services. See QST for further details.
- 18 Warminster ARC Flea Market - William Tennant High School. Parking Lot. Street Road, Warminster, Pa. All day. Prizes and surprises.
- 20 BARCC Meeting at the Casa Conti, Glenside, Pa. Dinner at 6:30 P.M., meeting 7:30 p.m.
- 31 Western N.Y. Hamfest. Rochester, N.Y. info WNY Hamfest, Box 1388, Rochester, N.Y. If you missed Dayton, here is the one to attend. Prizes, displays, talks - a real good one.

JUNE

- 8 Manassas, Virginia Hamfest. Info; Tim Wayne, WA4GVX, 1708 Sharp Drive, Woodbridge, Virginia 22191
- 11 Board of Directors Meeting, QTH W3CL, Harry B. Stein
- 14 Summer Meeting Delaware Valley Chapter QCWA, Buck Hotel, Feasterville, Pa.
- 14-15 June QSO Party, Hilltown, Pa. Set-up June 13th
- 19 General Club Meeting, Election Nite. Noise Figure Laboratory for VHF/UHF Converters and pre-amps. Bring your unit to the meeting for an accurate check - 14,28,60 MHZ IF.
- 28-29 ARRL - Field Day

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717 Paxton Avenue
Wyncote, Pa. 215-885-3830

TID BIT

Welcome back to Ben, K3ESL who is operating mobile on 6 meter FM. Get the home station going again real soon.

NEW PRODUCTS OF INTEREST TO HAMS

By Lyn, W3NSI

1. Six Meter SSB T/R: Yaesu has a new T/R unit covering 50-54 Mc, with operation on SSB-upper and lower, CW and AM. The FT 620B is all solid state and is rated at 24 watts PEP on SSB, 20 watts on CW, and 8 watts on AM. Four 500 KC ranges are supplied with the unit covering the lower two MC, but the top two MC ranges can be ordered from Yaesu. Unit can be operated directly from a 12VDC supply or from the built in 115 VAC power supply. A very handsome package, it measures 11 x 11 3/4 x 5 inches. Price \$399. Yaesu Musen USA Inc. 7625 E. Rosecrans Avenue. Unit 29 Paramount, California 90723
2. Counter Prescaler: Levy Associates have just introduced a 500 Mc prescaler which can be used with any counter that goes to 5Mc, since it can divide down by 10 or 100. Power supply is built onto the PC board that measures 3 by 4 inches. Unit is available as a kit or wired and tested. Price \$89 kit. \$109 W & T. P.O. Box 961, R Temple City, Calif. 91780
3. Code Reader: Something we used to dream about, is now a reality. The Atronics Co. model 101 can be adjusted for any speed from 5 to 50 WPM, and will display this on an alpha numeric readout display. In use it just connects across the speaker terminals of the receiver. Price \$195. Box 77 Escondido, Calif. 92025

VHF/UHF REPORT

By Jo, W2EIF

The activity on the 50 MHz and up bands continues low. In fact, it hardly justifies the space in Cheese Bits. There are always a few sporadic contacts to be had on any of the upper bands, if you have the rigs turned on and are listening. Unfortunately, just listening is not operating on or using the bands for what they are intended for - communicating! Maybe we should all make an effort to get on any of the bands that we have equipment for and call CQ - Maybe you will get an answer and at the same time promote the activity that you find so poor. Here is hoping that Spring and summer will find more activity!

JUNE 14, 15 -- VHF QSO PARTY ORGANIZED

W3HQT - Chairman

Band Captains as follows:

6 meters - WA3AXV	220 Mhz - WA3JUF
2 Meters SSB - K2EVW	432 MHz - WA3NGK
2 Meters FM - K3MWV	1296 MHz - W3HMU
2 Meters AM - K3ZSG	2300 and up - K3BPP

OFFICIAL BULLETIN NR 528 FROM ARRL HEADQUARTERS NEWINGTON CT MARCH 27 1975 TO ALL RADIO AMATEURS BT: Field Day 1975, June 28 and 29, will include a major change. This change, raising the value of a CW QSO to two points, has been recommended by the ARRL Contest Advisory Committee and is in line with a recent Board motion urging the CAC to study ways of encouraging continued use of a wide variety of modes in the Field Day. The modification is being instituted on a trial basis this year, to be adopted permanently if the change appears to be serving its intended purpose of increasing FD CW activity. Full rules will appear in the May issue of QST. AR

OFFICIAL BULLETIN NR 529 FROM ARRL HEADQUARTERS NEWINGTON CT APRIL 3 1975 TO ALL RADIO AMATEURS BT: The FCC has announced that amateurs within its jurisdiction will be permitted to use special call sign prefixes during calendar year 1976 as a part of the Bicentennial observance. The plan is completely voluntary and requires only the exchange of existing prefixes for specified prefixes in the block AA through AL. Stations with prefixes beginning with WA will use AA, WB will use AB, W will use AC, K will use AD, and WN will use AK. Complete details will appear in May QST. The use of these special prefixes is not permitted until January 1, 1976, and amateurs are cautioned not to begin using them prematurely. AR

26TH ANNUAL ARMED FORCES DAY COMMUNICATIONS TESTS

Military-to-amateur communications tests will again be eagerly awaited highlight of the nation-wide 1975 observance of Armed Forces Day, scheduled for Saturday, May 17th.

The 26th anniversary of Armed Forces Day will find military radio stations and "Ham" radio enthusiasts celebrating more than a quarter century of solid cooperation -- and mutual high regard -- between the U.S. amateur radio community and the U.S. Army, Navy and Air Force.

Key features of the annual tests include crossband operations in continuous wave (CW), voice (SSB) and radioteletypewriter (RTTY) modes. CW and RTTY receiving tests are also on tap.

Amateurs who make a confirmed two-way contact with any of the military stations taking part will be awarded special QSL cards commemorating the 26th Anniversary tests. In further recognition of their operating abilities and technical expertise, amateurs may qualify for special certificates by receiving and accurately copying an Armed Forces Day message from the Secretary of Defense. This message is transmitted in both CW and RTTY during the receiving tests.

No QSL cards are sent to acknowledge interception by short-wave listeners (SWL). But anyone with the necessary equipment and skills can copy the Secretary's message and become eligible for a certificate.

The '75 Armed Forces Day slogan is "American Forces -- Vigilant, Vital, Volunteer." The emphasis is on the vital need for strong, efficient, motivated military personnel to preserve and protect the American way of life.

Military communicators point out that the slogan applies equally well to the role of the American radio amateur -- who, for the past 26 years, has volunteered his services, time and again, in an exemplary and mutually beneficial partnership with his military counterparts.

Entries should be postmarked no later than 25 May 1975 and submitted to:

Armed Forces Day Tests
Chief, Navy-Marine Corps MARS
4401 Massachusetts Avenue, N.W.
Washington, D.C. 20390

VISITORS AT THE APRIL 17, 1975 MEETING

W2EA, Walt, Haddonfield, N.J.	K3GQC, Frank, West Chester, Pa.
WA3UDS, Ric, Churchville, Pa.	K3WAC, Bud, Malvern, Pa.
W2PN, Nat & EXYL, Ida, Upper Saddle River, N.J.	WA3LBI, Jim, Phila., Pa.
	WA3YZC, Gary, Churchville, Pa.

APPOINTMENTS:

K3IGX, Dick Boyle, Chairman, Picnic Committee
W3ZD, and W3FQD - Nominating Committee

RESIGNATION:

Lewis Clement, K4UV

APPLICATIONS FOR MEMBERSHIP:

WA3YZC, Gary S. Dallas
813 New Road
Churchville, Pa. 18966
Phone: 215-357-3213

WA3LBI, James R. Malone
5137 Pulaski Avenue
Philadelphia, Pa. 19144
Phone: 215-GE 8-5894

VHF ACHIEVEMENT AWARDS PRESENTED AT THE FIRST EASTERN VHF/UHF CONFERENCE - MARCH 22, 1975

EQUIPMENT:

Dale P. Clement, WA1FSZ, Excellence in Craftsmanship, 50 MHz and 432 MHz Transmitters.
Richard Como, K1LOG: Flexibility in Design, Modular Converters and Preamplifiers for 432 MHz.
Walt Bohlman, K3BPP: Innovative Antenna Design, Dual-Polarity Feed for 432 MHz.
Tony Souza, W3HMU: High-Powered Amplifier for 432 MHz.

In Addition the HAM RADIO MAGAZINE VHF ACHIEVEMENT AWARD was made to Dick Turrin, W2IMU. This award, which is a large walnut plaque, will be made annually to an outstanding vhf/uhf amateur. Nominations for next years award are welcomed.

Thanks to Jim Fisk, W1DTY of Ham Radio Magazine for the above information.

MOONBOUNCE FLASH BY W3HMU: After some repairs to the antenna damage resulting from the recent early April wind storm, the W3CCX 432 MHz moonbounce station was reactivated the weekend of April 20, 21. Some improvements were made to the antenna system using K3BPP's sun noise curves. Contacts were made with W0OQI, Colorado on a sked and with G3LQR and VE7BBG with-out a sked.

FOUNDATION FOR AMATEUR RADIO, INC.
Washington, D.C.

PRESS RELEASE

The Foundation for Amateur Radio, Inc., a non-profit organization with its headquarters in Washington, D.C., announces its intent to award three scholarships from \$750 to \$250 for the academic year 1975-76. All amateurs, wherever resident in the U.S. and holding an FCC license of at least General class, can compete for one or more of the awards if they plan a full-time course of studies beyond high school.

Application forms can be requested from the Chairman, Scholarship Committee, 8101 Hampden Lane, Bethesda, Maryland 20014. Requests must be post-marked prior to June 1, 1975.

The Foundation is devoted exclusively to promoting the interest of amateur radio and to scientific, literary and educational pursuits that advance the purposes of amateur radio. For Details see May 1975 Issues of Major Magazines.

TID BITS

Congratulations to Don and Barbara (WA3HVL) on the birth of Thomas Christopher. All doing well now.

A speedy recovery to Paul, K3WEU/6Y5 down there in Jamaica. Drop us a line soon.

K3JJZ, our favorite Auctioneer recuperating from recent surgery.

THIS IS YOUR LIFE (THE PACK RATS)
Part 10 "What It is All About"

The following information is attached to our membership applications. It was composed by our membership chairman Harry Stein, W3CL, modified by W2EIF. This may help you in answering questions asked by fellows wishing to join the club.

The Mt. Airy VHF Club Inc., was started on May 15, 1956, by a group of amateurs interested in VHF activities. The basic rules were established at the meeting, and they have not changed, except where it has been found to the best interest of the club to do so, and of course by a vote of the membership.

The overall club membership, by present rules, is limited to 90, with a minimum age limit of 18. Membership is by invitation only, and is not concerned with the race, creed or politics of its individual members.

The purpose of the club is to promote interest in VHF activity and improvement in equipment.

To qualify for membership, the amateur must be active on the VHF bands, 50 Mcs and up, be able to help fellow club members when called upon, and join in club sponsored events to best of his ability, and last but not least, keep his dues paid up.

The constitution provides means of removing members automatically, if their activity vanishes or no response to dues notices is received. The reason for this should be obvious, because with a limited membership, the club must press for maximum activity in order to maintain the organization in vigorous condition and promote its purpose.

All club members are encouraged and expected to participate in the club sponsored activities, which include participation in club nets, attendance at meetings and club sponsored events, and of course taking an active part in the January VHF Contest. Club members are required to assign their contest score to the Mt. Airy VHF Club, Inc.

The main club sponsored events of the year are, (1) Jan. VHF Contest; (2) Ladies Nite (to reward the XYL or YL for their patience during the contest), (3) June QSO Party (the club enters this affair instead of Field Day), (4) Pack Rat Picnic - held on the second Sunday of August, (5) Hamarama in October, (6) Monthly Meetings, held on the Third Thursday of each month at the Southampton Free Library, Street Road, Southampton, Pa.

There are also opportunities for the particularly talented members of the club to make presentations before the membership to discuss interesting personal vhf projects or activities, in fact this is encouraged. Prospective members shall be sponsored by at least 2 club members and be reviewed by the membership committee before being voted upon by the membership.

(TO BE CONTINUED) W3SAO, Frankie, Club Historian

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



AD
MANAGER
K3MWM

ADS

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<p>609-429-0087</p> <p>BRADDOCK ASSOCIATES MANUFACTURERS' REPRESENTATIVE</p> <p>EDWARD BRADDOCK MEMBER: I.E.E.E. W2BAY</p> <p>POST OFFICE BOX 305 HADDONFIELD, N. J. 08033</p>	<p>215-727-9052</p> <p>HARRY B STEIN ASSOCIATES COMMUNICATIONS CONSULTANTS</p> <p>HARRY B STEIN</p> <p>2087 PARKDALE AVE GLENSIDE, PA. 19034</p>
<p><u>A request from your AD Manager</u></p> <p><u>PATRONIZE OUR ADVERTISERS</u> Tell them you saw their ad in CHEESEBITS. Leave your QSL card with them. CHEESEBITS is one of the best read local radio club papers. Circulation - 300</p>	<p>73 magazine for radio amateurs</p> <p>1 year - \$8 3 years - \$16</p> <p>PETERBOROUGH, NEW HAMPSHIRE 03458</p>

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Contact: Ed Braddock, W2BAY
Phone: 609-429-0087

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CONTACT: Richard Pierce, K3MWB
2803 Newportville Road
Newportville, Pa. 19056
Phone: 215-788-1527

FOR SALE: 2 mtr. Motrac - solid state, 60 W. Two tapstone 6 mtr. converters - 1-10MHz IF 1-14MHz IF

Ameco Nuvistor 6 mtr. converter; 7 or 14 MHz IF
Ameco Tube 2 mtr. converter - 7 MHz IF
SX62 Receiver, All band AM & FM
HQ150 General Coverage Receiver Make Offer

CONTACT: K3GQC, Frank, After 6 P.M.
Phone: 215-436-6051

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HORSHAM, PA. 19044
215-674-0300

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FOR SALE: R48 Receiver, 220-225 MHz FM detector Intact.
RCA CMV - ID, 152-175 MHz. FM receiver/Transmitter, 10 watts.
Swan 250 - 6 mtr. SSB W/AC Pwr. supply.
CONTACT: Dan, WA3NFV
Phone: 215-277-0972

FOR SALE: National NC-300 - 10 - 160 Mtr. rcvr. with converters in cabinet for 50,144 and 220 Mhz.
Viking Ranger - 10 - 160 Mtr. xmtr. (CW and AM) with T/R switch 18 AVT/WB
New Vibroplex, Mfj Keyer, '74 callbook, Q-multiplier, capacitor tester, rotator and more.

CONTACT: Ric Janssen, WA3UDS
143 Fairhill Drive
Churchville, Pa. 18966
Phone: 215-355-1980

FOR SALE: Drake TR6, TC2, RV6 complete 6&2 mtr. station w/remote VFO, noise blanker, all filters & crystals, Best offer.

CONTACT: K3ACR, Rich Pattison, 717 Paxton Ave. Wyncote, Pa. 215-885-3830



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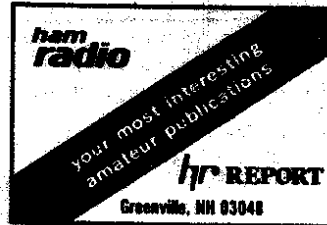
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—Guru Maharaj Ji

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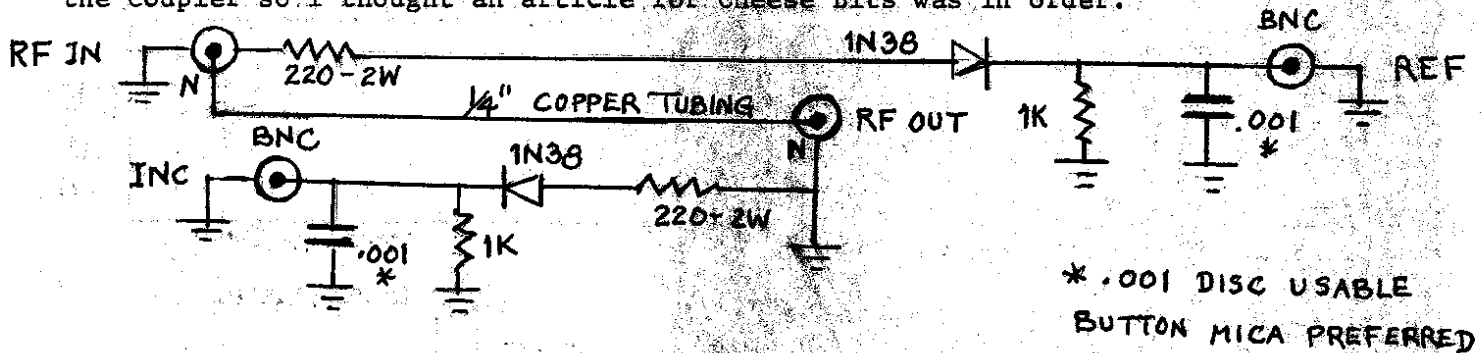
Richard Pattison
Director of Quality Assurance

Woodhaven Industrial Park, Cornwall Heights, Pa. 19020 • (215) 638-9400

READY MADE DIRECTIONAL COUPLER

By, WB2SZK

Described in this article is the directional coupler (SWR Meter) which I had on the back of my six meter linear at Homebrew Night. Some fellows seemed interested in the coupler so I thought an article for Cheese Bits was in order.



My couplers are built in a milled aluminum box, but a Bud Mini Box CU-3001A may also be used. The connectors are mounted as shown in the end view diagram. The two lower screws on one end have ground lugs mounted under them and the top screw holds a ceramic stand off. The opposite is added at the other end. A 220 OHM 2 watt resistor is soldered in the bottom, with the resistor body very close to the ground lugs. The resistor lead is the pickup loop. The center conductor is added next, and then the other 220 OHM 2 watt resistor is soldered in place. This resistor is opposite the first one added.

Next the diodes are added from each standoff. A divider is now added as shown in the drawing with two (2) holes drilled to pass the diodes through to the connectors.

The output of the diode is connected to the BNC jack along with the 1K resistor and the bypass capacitor. This completes the construction and the unit is ready to be tested.

Any meter up to about 1 MA may be used. (I used a 200UA with a square law scale). The 1K resistor may be increased or even eliminated if you run very low power or use a rather large meter movement.

To calibrate the coupler, connect your transmitter through the coupler into a good 50 OHM load, (well matched antenna usable) and adjust the incident pot (50K) to read full scale on your meter. Reverse the coupler and calibrate the reflected pot (10K) for full scale. The coupler is now ready to read VSWR only.

If you also want to use it as a watt meter, you will need a known standard to calibrate by. However, to read power correctly, a square law scale will be needed. The calibration is the same principle only instead of a ratio you may read the VSWR directly in watts.

Into a good 50 OHM load if the directivity is not good enough (reflected reading much too high) this can be corrected by changing the spacing between the center conductor and the resistors.

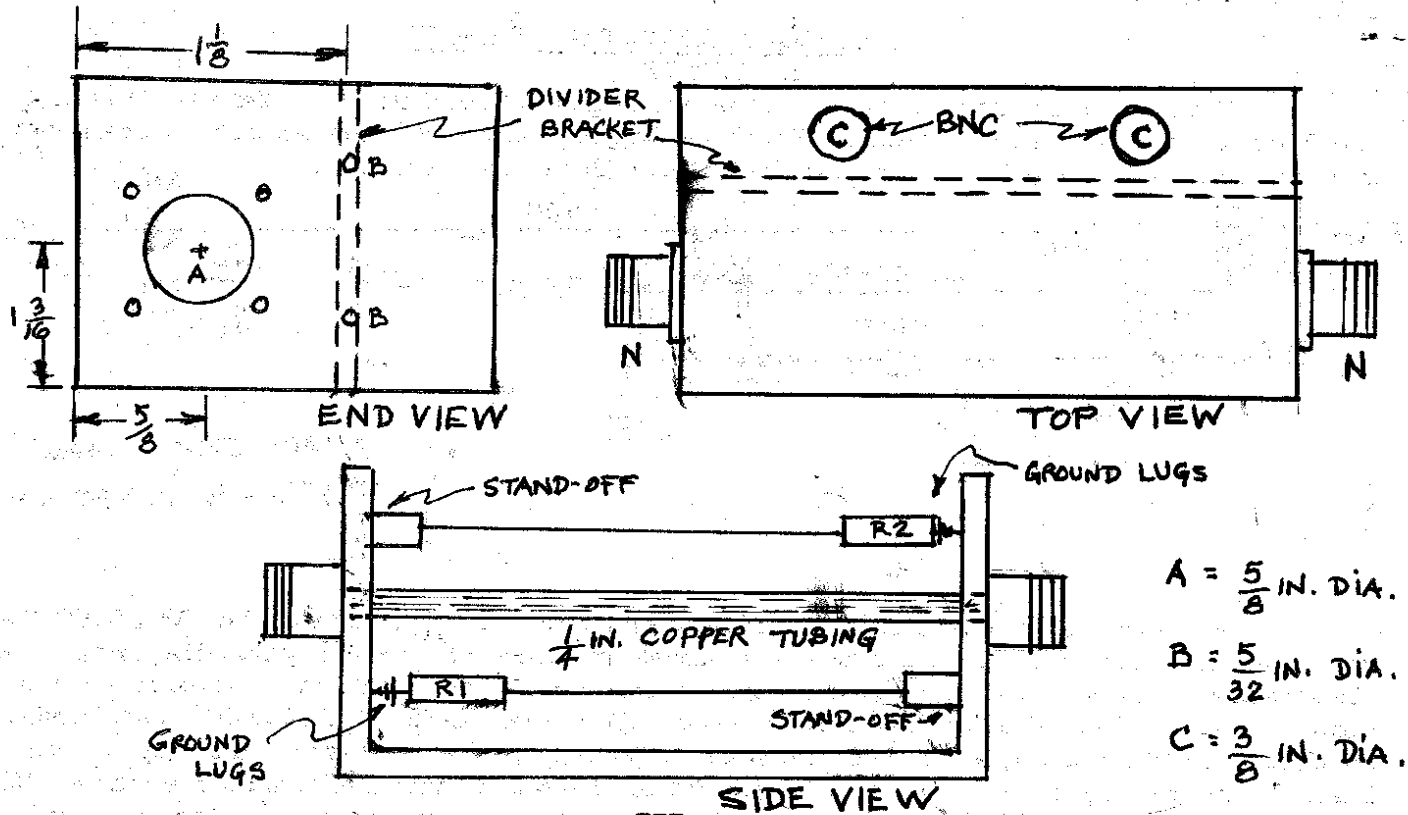
I have compared extensively the coupler to a Bird thru-line Model 43 and it works every bit as good as the Bird for a much smaller investment. You just need one or its' equivalent to calibrate by!

Like anything else, the coupler has its draw-backs which can easily be overcome. If one is made and calibrated at 6 meters, it will not be accurate at two meters due to the pick-up loop being much longer electricly at 2 than at 6. Therefore, most output is obtained at 2. But instead of buying two plug in elements and a Bird 43, just build two, one for each band.

I have used the couplers up to 147 Mc and they work fine, although I intend to try one at 220.

I hope this article will be of some use to some of the gang.

(See drawing on page 10)



SPACE NET CONTEST ANNOUNCEMENT

By WB2MTU, Tony

Following info on next VHF Space Net Contest. Apollo #11 - 6th Anniversary - July 19, 20, 1975, start at 6 P.M. local time throughout, and ends 6 P.M. (should skip prevail-extension of time accordingly, on deadline).

Rules: Contact number and zip code - only requirement.

Modes: AM/FM/SSB/CW/RTTY/FAX/SSTV/ - No repeater contacts valid

Bands: All VHF/UHF

Operating Rules: Same station can be reworked on different bands and in different modes.
Each time zip code will count in final scoring.

Scoring: Last Two Digits of each zip code will represent, points from each contact.

Example: 6-AM-08081/6-SSB-08081-/-2-AM-08081

220 FM-18974/6AM-18974/2 FM-18974

6AM-18901/220FM-18901/432 FM-18901

Total score in example = 468

Power Classes: Class I - 100-1000 / Class II - 25-100

Class III 5-25/ Class IV 1-5/ Watts

Trophies: 1st and 2nd place, in each class.

Club Participation: 1st and 2nd place trophies.

Logs to be mailed by August 15, 1975: VHF Space Net Center

Box 909, Sicklerville, N.J. 08081

USSR AND U.S. APOLLO - SOYUZ LINKS FOR JULY 1975 (THANKS TO ED-W3HKZ)

Ground to each Spacecraft 296.8Mhz - AM

Apollo to Satellite 2256 Mhz

Apollo from ATS-6 Satellite 2077.4 Mhz

Ground to Apollo 2106.4 MHz up voice-data

Apollo to ground 2287.5 MHz down voice - telemetry

Apollo to ground 2272.5 MHz TV

Apollo to Soyuz 296.8 MHz AM voice

Soyuz to Apollo 296.8 MHz AM voice

Apollo to Soyuz 121.75 MHz FM voice

Soyuz to Apollo 121.75 MHz FM voice

Soyuz to Apollo 296.8 MHz AM voice

Apollo to Soyuz 259.7 MHz AM voice

296.8 Seems freq. to monitor (AM)

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SPORTS

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CONDITIONS

All reservations are subject to a deposit of 25% of the total rental being received by the owner. Deposits are not normally refunded in the event of a cancellation, unless an alternative reservation is obtained for the same period.

CHURCHES

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CHECK-OUT TIME - 12:00 Noon.

Rates quoted in U.S. Dollars and subject to change without notice.

Summer (April 16 to December 15) daily rate \$10.00. (EP-No meals) - Add \$9.00 for MAP (2 meals - Dinner and Breakfast).

FOR RESERVATION CONTACT

Mr. Kenneth H. Penchoen, 6Y5BF

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P.O. Box 92, Montego Bay,

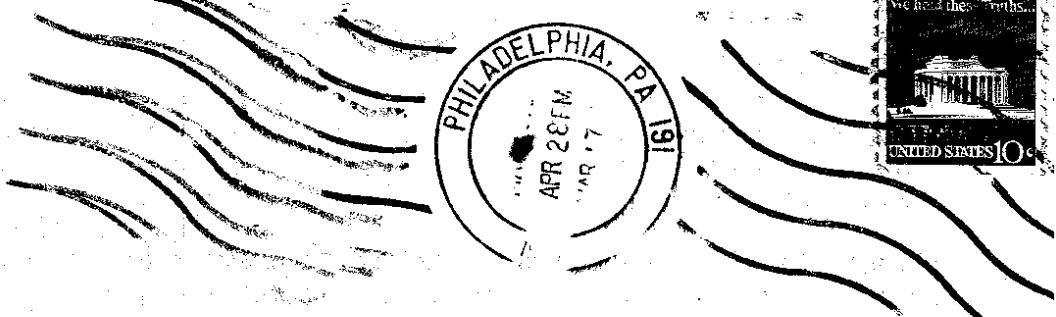
Jamaica, W.I.

Tel: 952-2243; 952-2385; 952-2680

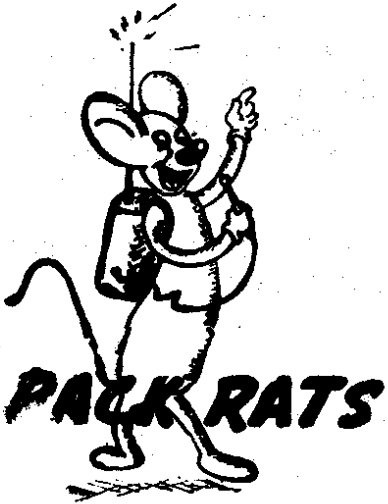
OFFICIAL BULLETIN NR 530 FROM ARRL HEADQUARTERS NEWINGTON CT APRIL 10, 1975 TO ALL RADIO AMATEURS BT: Amateurs intending to apply for reciprocal operating permission in other countries for travel this summer should not delay sending applications. November 1974 QST, page 92, carries a list of addresses from which detailed information may be obtained for most countries of the world. ARRL headquarters can supply information on others. Forms for U.S. amateurs intending to visit Canada, and for Canadian amateurs intending to visit the US., are available from ARRL headquarters. AR

OFFICIAL BULLETIN NR 531 FROM ARRL HEADQUARTERS NEWINGTON CT APRIL 17, 1975 TO ALL RADIO AMATEURS BT: Now is the time to request forms for the 1975 ARRL Field Day, to be held June 28 and 29. Send a self addressed, stamped envelope for one summary sheet and an appropriate number of Operating Aid number six forms. Your group will need one form six per band/mode. A major rules change this year, on a trial basis, is double points for cw contacts. Other bonus points, including use of natural power are the same as last year. Complete rules in May QST. AR

Cheese Bits
2087 Parkdale Ave.
Glenside, Pa. 19038



W3FQD Dick Huntzinger
130 Fairhill Drive
Churchville, Pa. 18966



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