# PACK RATS



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MT. AIRY WIE BADIO CLUB, INC.

TOT. AIRY VHF RADIO CLUB, INC., PHILADELPHIA, PENNSYLVANIA ARNS 30.125, 144.150, 220.125 432.110, 1296.110 MHz-W3CCX-Repeater 222.98 MHz

AMERICAN RADIO RELAY LEAGUE

Meetings: Third Thursday of each month at 8:00 P.M.

Southampton Free Library, 947 E. Street Road

Southampton, Pennsylvania 19866

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# THE PREZ SEZ

First off I'd like to thank Herb Groschoff and Hewlett Packard for the fine demonstration of the NF equipment. Also it was good to see some of the rats are still building their preamps.

It was nice to see some new faces at the club meeting and I hope you will continue to come to some of the meetings when you get the time. It's always good to hear input from old and new members. Remember, talk up the club and try to get some new prospective members - "it's got to be one of our goals"! Well it's that time of the year again to get those stations in correct operating order for the BIG - I mean the BIG January Contest. Dust off the equipment - check out the antenna systems and make that most important call to your contest captain for that needed help if you need any!! Mark this weekend on your work and personal calendar --- THE WEEKEND OF JANUARY 20th AND 21st --- DON'T FORGET PLEASE! We need the help of all members this year if we are going to keep up our OUTSTANDING IMAGE as the #1 VHF/UHF CLUB. The words are leaking thru the grapevine freq's that the western NY operators are going to get the club this year in scoring. NOW WE DON'T WANT THAT TO HAPPEN, DO WE??!!

I guess by the time you get this news letter you'll be taking those cold turkey sandwiches to work with mao and coleslaw yum yum!! I hope all of you had a healthy and Happy Thanksgiving. Boy I can remember some places I was at while in the Navy wishing I was home for the Holidays - let's be thankful for the plenty and share a little if we can with the less fortunate.

I was talking to SANTA the other day and he said that the word is out on the Pack Rats. So make a wish for that new rig. I hope all of you have a Happy New Year and a healthy one. Have some eggnog for me!!!

Listen for the weak ones,

Dave, N3CX

KEEP WORKING ON YOUR 903 MHz PROJECTS!!!!!!! Pack Rats CHEESE BITS is a publication of THE MT. AIRY VHF RADIO, INC.

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We operate on an exchange basis with other publications. Anything that is printed in CHEESE BITS may be reprinted, unless otherwise stated, and proper credit is given. DEADLINE FOR ARTICLES IS THE MEMBERSHIP MEETING: THE THIRD THURSDAY OF THE MONTH SWAP SHOP ITEMS - NO CHARGE

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MONDAY NIGHT NETS	NET CONTROL
7:30 PM - 50.125 MHz	W3CL
8:00 PM - 144.150 MHz	W2EIF
8:30 PM - 220:125 MHz	WC2K
8:30 PM ~ 224.58 MHz	K3GAS
9:00 PM - 432.110 MHz	WA3axv
9:30 PM - 1296.1 MHz	WA3NUF



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# CALENDAR OF COMING EVENTS By Harry Brown, W31IT

## DECEMBER

- 1-3 ARRL 160-Meter Contest. 2200 UTC December 1 until 1600 UTC December 3. See page 80 of November QST for rules.
- 9-10 ARRL 10-Meter Contest. 0000 UTC Saturday until 2400 UTC Sunday. See page 79, November QST for rules.
- Predicted peak of the Geminids meteor shower at 1804 UTC.
- Pack Rat Board of Directors meeting at the QTH of Dave, WB2VLA. Call 609-882-1040 for directions. All interested parties invited. Meeting starts at 8:00 P.M.
- Regular meeting of the Mt. Airy VHF Radio Club at the Southampton Free Library on Street Road in Southampton, Pa. Sorry, this is the only closed meeting of the year and is for members only. Secret plans will be discussed for the January contest. Have you qualified to submit a log this year for the club by attending the minimum of 2 meetings?
- 23 Chanukah.
- 25 Merry Christmas to all!
- 31 New Years Eve.

### TID BITS

- -It was nice to have John Grove (now KE20I) and Cyndi, KB2EFP visit our November meeting.
- -Those needing help with their 903 transverters, please visit WA3AXV's QTH on Sunday, December 3, 1989 at 1:00 P.M.
- -The winds on Thursday, November 16, 1989 damaged WA3AQA's 6 meter beam and completely destroyed the tower and antennas of W3BRU. Let Bob, WB2YEH know if you need help in the repairs. WA3AXV had some minor damage also.
- if you need help in the repairs. WA3AXV had some minor damage also. -We sadly report that Fred Hoffman, K3SSC, a friend of the Pack Rats became a silent key.

# VISITORS - NOVEMBER 16, 1989 MEETING

# FROM THE CUTLER FAMILY

We wish to express our heartfelt thanks to the radio friends of K3GAS, Doc Cutler for their love, support, expressions of sympathy and to the Mt. Airy VHF Radio Club for the generous contribution to Deborah Hospital in his memory. May his memory be for a blessing.

Loretta, Alan, and Linda Cutler

# PROPAGATION REPORT Paul Drexler, WB3JYO

It's been an awesome month for even the casual 6 meter op! The F2 openings everyone has been looking for have finally arrived. There's plenty of good DX to be worked on the band; with the F2 openings it doesn't take much power to work the rare ones! If you can monitor WWV at 18 minutes after the hour look for F2 openings when the Solar Flux Index is above 200 and the K index is 3 or less.

On the 25th of October W2HRW reports hearing 9Y4VU (Trinidad), working OA8ABT (Peru), ZS8MI (South Africa), and a CX3 (Uruguay). On the 27th of October from 1550 to 1630 GMT HC8K (Ecuador) was S9+10 into the Philadelphia area. Although no other DX was heard on the band, he worked nearly every US call area and several VE3's.

On November 2nd at 2100 GMT the NOLL/B beacon (at 50.077) was S3 into our area but no stations were to be worked. On the 5th around 1330 GMT HC2FG (both

FI07, Ecuador) were worked by a number in the Philadelphia area.

The real excitement however, broke loose during the weekend of the 10th at 1300 GMT when G4CVI (IO90) was worked with good signals. Minutes later, England Ireland, Jersey, and France were worked, with DX stations to 50.2 MHz! European worked as far west as 9 land, and during the peak of the two hour opening there was excellent stateside tropo as well. WC2K reports that the WWV SFI was 261, the A index 2, and the K index 3. Rick also reported working the following on the 11th: CT, EI, F, G, GU, GJ, GI, GM, GW, GD (Isle of Man), SM (Sweden), LA (Norway), OH (Finland), ON (Belgium), and DL (Germany)! Rick notes that beam headings skewed to the SE. The next day, on the 12th, the band opened again in a similar fashion to Europe and then into South America and the West Coast. WC2K reports working a GMO (Ireland) via long path! A KL7 is reported to have been worked around 1800 GMT by KlHTV/3 (MD). Pack Rats WA3AXV, N3BBI, WA3IWT, WB3JYO, WC2K, KS2T, and W3VIR got in on the weekend opening of the 11th and 12th. Rick netted 6 new countries during the weekend - congratulations Rick!

On the 13th several Europeans were briefly heard on the band but signals were weak and very little was worked. On the 15th however, the band did a repeat of the previous weekend's propagation with excellent propagation to Europe from 1200-1600 GMT, stations G, GI, GJ, GM, GW, EI, CQO, PA, OH, and DL were worked (tnx WC2K). Rick then reports working VY1AU (Yukon Territory) at 1930 GMT! Both WC2K and W2EIF worked Alaska stations NL7OW, KL7IKV, and KL7HB, all with S9+ signals! WWV numbers for the 15th showed a Solar Flux Index of 244, A index of 10, and K index of 2.

On the 17th the band opened to New England and the Mid West with an aurora starting around 2200 GMT. And as if we still hadn't had enough propagation, it opened up to Europe again for over an hour and then to South America to W6JKV/CT3!

There's been lots of good DX to work, even the Frankford Club has been calling out 6 meter DX on their packet board! In short, the band is HOT!

# A NEW TWIST FOR 220

Acting on behalf of the National Communications System, the Department of Justice has filed a petition in the US Court of Appeals for the DC Circuit requesting that the Court review the FCC action in Docket 87-14 denying reconsideration of the 220 MHz allocations decision. The petition seeks review on the grounds that the FCC action was arbitrary, capricious, and an abuse of discretion, and requests that the action be set aside and the matter remanded to the FCC. The case, United States of America vs Federal Communications Commission, has been assigned case number 89-1635 by the clerk of the court. A similar petition for review filed earlier by ARRL was designated number 89-1602. QST DE WIAW.

# SWAP SHOP

# WANTED:

Pack Rat operators to participate in January ARRL VHF Contest with defending national champion multi-op station WC2K. No experience necessary. Bring favorite headphones, paddle, beverage, snack, and the desire to have fun! Room and board provided. CONTACT: Rick Connor, WC2K at 609-268-0736.

# COMMERCIAL ADS

LOOP YAGIS: 902 MHz 33 element \$89 kit, \$109 assembled and tested. 1296 MHz 45 element \$89 kit, \$109 assembled and tested. 1296 MHz 55 element "Super Looper" \$99 kit, \$124 assembled and tested. 2304 MHz 45 element \$75 kit, \$89 assembled and tested. Also available: element and hardware kits for above. 2 and 4-way power dividers. Discount on complete arrays. Solid State linear amps, 13VDC: 1296 MHz, 8W in 35W out \$315; 1W in 20W out \$265, 4W in 70W out \$695. GaAs FET preamps: 902 MHz .8dB NF \$90, 1296 MHz .8dB NF \$90, 2304 MHz 1dB max NF \$140. SHF Systems no tune xvrtr kits w/144 MHz I.F. now available for 902-3456 MHz. Write for complete catalog. DOWN EAST MICROWAVE, Bill Olson, W3HQT, Box 2310 RR-1, Troy, Maine 04907. For information and orders, call (207) 948-3741.

FOR SALE: Coaxial directional couplar PRDX 4420 - A20 - New 500W (forward) 50 ohm, calibration at 5 frequencies 7-12. 4 GHz, w/complete spec sheet, \$35. New, power supplies regulated 12.8VDC @ 2-A, \$82.50; 12.8VDC @7A, \$37.50. FERTIK'S ELECTRONICS, 5400 Ella Street, Philadelphia, PA 19120 (215) 455-2121. HAM RADIO MAGAZINE is the leader in Amateur Radio state-of-the-art! Projects for every interest. Don't miss another exciting issue! HR Magazine, Green-ville, NH 03048 (603) 878-1441.

MORE MICROWAVE: All prices still post-paid; Ham call w/check OK. All items similar, w/about 5mw output on 10.525 GHz, w/detector diode and horn antenna. Solfan style, round-horn style (as in recent 73 Magazine) either 5" or 8" long or 50's style which has mounting tabs on large end of horn. I have a few Alpha units which are small, light, and don't come w/any horn, but have a good detector, \$20 ea. I also have two new horn antenna styles in stock, in quantity. They are metalized-plastic, very pretty and light, w/regular 4-hole mount. The 8dB one is \$9, 14dB unit is \$14. WBFM modulator/pwr supply kit is \$16. Spare Gunns for all \$5 ea. SASE for latest flyer. SHF MICROWAVE PARTS CO., 7102 W. 500 S., La Porte, IN 46350.

MICROWAVE GROUP, an amateur club from San Diego supplies a list of 10 GHz items available from them. 30 MHz IF strip w/pwr supply and modulator for use w/GUNN oscilator/detector, includes board and TDA-7000 FM rcvr chip \$10. Project book cover IF systems, xcvrs, ant. systems, test equipment etc. 119 pages including artwork \$15. CW EPROM IDer, includes chip w/your call like "DE N3CX/B" etched board \$12. Impatt cavity 10 GHz oscillator w/WG-16 filter, 30MW \$30. 50-100 MW Gunn devices \$5 ea. 100MW+ devices \$10 ea. SAN DIEGO MICROWAVE GROUP, c/o Chuck, WB6IGP, 6345 Badger Lake, San Diego, CA 92119.

# MORE TID BITS

- -Hugh Turnbull, W3ABC has been elected again for Director of Atlantic Division. Vice Director is Kay Craigie, KC3LM. Congratulations!
- -Pack Rats heard chasing 6-meter DX this week: W3VIR, WA3IWT, W3UBO, WB2YEH, W3IIT, KS2T, W3HMU, WØRSJ, W2EIF, WB3JYO, N3BBI, WA3AXV, and WC2K.

# FRENCH 6-METER INFORMATION

During any given 50 MHz opening lately, there have been numerous French operators active throughout the band. Much controversy and rumor has been attached to "theories" of authorization for French stations. Recently, Ray, K5ZMS offered an explanation based on his direct contact through the SMIRK organization as well as information provided by the ARRL.

There are 252 French stations which hold official 50 MHz permits. These stations are those which are located near VHF TV transmitters. They are permitted to operate above 50.2 MHz. Their callsigns are unique in that special prefix letters C, D, and E are added. An example is FlEMT becomes FD1EMT.

There are also 100 VHF Experimental Group licenses issued. operators are not required to hold a permit such as the above mentioned group, however several of them do. The Experimental Group license allows the operator to work in the following frequency windows: 50,086-.089, 50.111-.114, and 50.136-.139 MHz.

For the moment, if you want to be assured of a legal French QSO, look for stations in the proper areas of the band or ask the stations to QSY.

A station from ON (Belgium) and many stations from DL (Germany) have been active on the band. These are countries which are soon to authorize 6-meter operation, but as of November, have not yet.

During the week of November 13-17, K8WKZ and VELYX completed 50 MHz DXCC. These accomplishments represent many years of chasing DX on the band. Many other 6-meter operators, including several from NJ/PA are expected to go over the century mark with just a few more new ones. Most of these operators have been pursuing the goal for over 30 years, since the time when only a handful of DX stations were authorized.

# ATTENTION CONTESTERS

Many amateurs have been confused by Part 97.119(a) of the new Part 97 concerning station identification. This rule states, in part, "... No station may transmit unidentified communications or signals, or transmit as the station call sign, any call sign not authorized to the station." ARRL asked FCC for clarification of this. The Personal Radio Branch (which governs Amateur Radio) of the FCC has okayed the following interpretation:

When another Amateur comes over to your house to operate your station,

there are two possible station identification situations:

First, you may designate him as the control operator of your station. Accordingly, he must identify with your station's call sign when operating within the privileges of both his license and yours. (He signs his call following your call when he operates with privileges that exceed yours.) You both share responsibility for the station operation as outlined above.

Second, you may simply "loan" your equipment to your friend. The equipment in your shack then becomes his temporary station location. He is the station licensee and control operator. Remember, a station location is any place you can have radio equipment-a basement, car or specific geographic location. In this case, he identifies with his own station call sign, and is solely responsible for the operation of the station.

Often, hams will travel to another, more effective station to snag a rare DX country through a pileup or work a contest, and want to use their own call sign for DX or contest credit. This is fine under situation two described

above. Wnx ARRL Letter.

<u>*</u>				
SEASONS  GREETINGS  JO + DOLLY  W2 EIF	MARSHA (WASTEM) FRED, JOSHUA AND REBECCA	Jack town  Jack town  Jack town  WAAXU  Florence fower  WAAWYE	HOLIDAY GREETINGS FROM JOHNNIE W3CXU	MERRY CHRISTMAS  TO  PACKRATS  GARY S  JETINIFER)  TESS, YANKEE,  BREEZY
Happy Holidays Dave w82vLA Family	Happy Holidays WORS J Family	HOLIDAY GREETINGS de  SYLVIAH HARRY W3CL	HAPPY Holidays de Joedbonk K3VEB	HAPPY HOLIDAYS!  DEAC W3AJF
HoLIDAY GREETINGS THE CHANCELLOR AND GORDON K3VYG	HAPPY HOLIDAYS  DE  GEORGE  W3HK	MERRY YMAS  TAME DE WB3DSK  DAVE WB2D  MARK  MARKE  MARK  MA	MERRY CHAISTMAS  AND  HEAPPY MEN YEAR  LYH W3NS!  & SALLY  & TAY!	Merry Christmas And Happy New Year Kezoi · John KB2EFP- Cyndi
Seasons Greetings From "Mother Rat" - Nelen - Bricke	N N3AOG C E Happy E Holidays	I wish everyone a Merry xmas & a Healthy Happy New Years.  fm N3CX+ family Lister for the weak onest	MERRY CHRISTMAS! KA3MGB HAPPY HOLIDAYS!	Barb- wb20ef Bob- wb2yeh Kristina
HAPPY HOLIDAYS JE BERT WSTHP + ERNIE WSKK	MERRY CHAISTMAS DE RICK, JANUE, RICH, HARE, PAUL-TIM COHMOR	U 4984	Support de Contractor Right Contractor Right Contractor Right Contractor Right Contractor Respective	Merry Christmas Harry, W311T Rose
MERRY CHRISTMAS HAPPY NEW YEAR OU ON THE BANDS!	TKM	ON THE FIRST DAY OF CHRISTMASS MY TRUE LOVE GAVE TO ME AURORA! HOME Holdoy'S POT WB3 DAE PETTY KB3 TEF	Sensons GREETINGE FROM W3GXR Bob	HAPPY HOLIDAYS FROM WASJUF DAVE BARB RYAN DAVE JR.
HAPPY HOLIDAYS John and Barbara K3 KTY From FLorida	Seasons greetings From ED W3AJS	Merry X mass to all Wasyn WB20HA Sue N2CYM Stewn BAEY and FU.J.W	Seasons Greetings From W3VB0 Frank	Seasons Greetings DE WA3FOF Family

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