PACK RATS

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CLUB CALL: W3CCX

MT. AIRY VHF RADIO CLUB. INC.

MT. AIRY VHF RADIO CLUB INC., "THE PACKRATS", PHILADELPHIA, PENNSYLVANIA NETS: 50.125, 144.150, 220.125, 224.58, 432.110, 903.110, 1296.110 MHz. AFFILIATED CLUB: AMERICAN RADIO RELAY LEAGUE ARNS

Meetings: Third Thursday of each month at 8:00 PM Southampton Free Library, 947 E. Street Road Southampton, Pennsylvania 19866

VOLUME XXXII

JANUARY 1990

NUMBER I

THE PREZ SEZ

HAPPY HOLIDAYS to all! I hope you all have a healthy and joyful New Year. Brother, time sure flies and I hope the 90's are good to the VHF/UHF and microwave frequencies.

The 80's sure were nice to the builders - MMIC's, lower costs on GaAs FETS, and a new 902 MHz band for the amateurs who love the UHF frequencies. Let's try to populate the UHF and microwave bands. The 80's had some rough spots though - encroachment on 220, politics with the band plans, and the loss of a few great Pack Rats; we sure will miss Doc!

The December meeting was a good one and Bob, WB2YEH has done a BANG UP job with organizing the January contest plans. I hope all of you have a fun weekend in the contest, and let's all work together for another club win. If anyone needs help, please let me know!!

We have a well-known contester in the position of 1990 June VHF Contest Chairman. That's Ron, WA3AXV, and I'm sure he'll be getting in touch with everyone soon to get things going for this year's effort. Plan now to keep that weekend free.

I hope that the new copying method works well for the newsletter, I'll be looking at it the same time you all do. Harry, W3CL is retiring from Editor and Rick, WC2K, has assumed the duty. We wish Rick many years of success with Cheesebits. Also, Dave, WB2VLA, is retiring from printing the paper and we thank him for many years of faithful service. Thank you again. Without members like these, we couldn't continue putting forth a club bulletin.

Boy, I sure hope everyone is faring this cold weather we've had! The "T" shirts will be ready for pickup at the January general meeting, so come on out and get yours so you can dress up for the contest.

During the contest, don't forget to look for our buddies from Rochester VHF Group in western New York. For now, good luck to all and CU at the next club meeting. Remember to try to find new members for our club.

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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 CONTRO
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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By Harry Brown, W311T

JANUARY

- l New Years Day
- Predicted peak of the Quadrantids meteor shower at 1806 UTC.
 This one, known as "the Quads", is an intense but brief shower.
- 6 NFL divisional playoffs
- 7 NFL divisional playoffs
- 8 EME perigee
- ll Full Moon
- Pack Rat executive board meeting at the QTH of Ernie, W3KKN. Meeting starts at 8PM. All interested parties welcome. Call (215)659-3485 for directions.
- 14 NFC/AFC Playoffs
- 15 Martin Luther King Jr. Day
- Regular Meeting of the Mt. Airy VHF Radio Club at the Southampton Free Library on Street Road in Southampton, Pa. All VHFers and friends are welcome. Due to construction, use side entrance by the driveway.
- 20,21 43rd annual ARRL January VHF Sweepstakes. Pack Rats compete to retain unlimited class championship. Gavel #30 is on the line! All members are expected to participate. See December QST for rules.
- 28 NFL Super Bowl XXIV

JANUARY CONTEST REMINDER By Bob, WB2YEH, Contest Chairman

The January Contest is almost here - starting at 1900 UTC on Saturday, January 22nd. Now is the time to take care of any last minute equipment or antenna problems and needs. Let your team captain or me know if you need any help or have any questions. Let's use the Pack Rat check-off sheet and make it our goal to work every fellow member on every band possible. LET'S GO TEAM!!

PROPAGATION REPORT By Paul Drexler, WB3JYO

The F2 propagation continued through the past month, with almost daily openings from the East Coast into Europe during the morning and occasionally to the West Coast in the afternoon. Mixed in with the F2 has been some seasonal E-skip to make the band a lively playground. Since December 10th however, F2 openings have been short-lived and much less intense compared to the month of November. This condition is related directly to the solar flux which took a nose dive from 220 on the 9th to 167 on the 12th. The Solar Flux Index, reported by WWV each hour, has been on a slow uphill recovery and at the time of this writing is around 190. Forecasts for the past week have predicted low to moderate solar activity, not what 6M DXers are looking for! Perhaps things will pick up again around the new year.

November 18th was a busy day for 6 meters - Europe, Africa, South America, and Hawaii, to name a few, were all worked during the day! N3BBI reports working 5 continents in 5 hours: South America, Africa, Europe, Hawaii, and North Americal Rick, WC2K reports working ZF3E (Cayman Islands), W6JKV/CT3 (Madeira Is.), DL3ZM/YV5 (Venezuela), G3GJQ/5N0 (Nigeria), ZS3E + ZS3KC (SW Africa), TF3EJ (Iceland), and D44BC (Cape Verde). Ron, WA3AXV reports working 8P6JW (Barbados), PZIAP (Surinam), and HK3AVR (Colombia). The band was open again the next day to much of Europe, and V47SIX (St. Kitts Is.) and OHIZAA (Finland) were in to this area. W2EIF worked several G's on the 19th. On November 20th, WC2K caught 6 meters as it opened at 1200Z and worked French stations until 1227. ZWØF (Fernando de Noronha, [east of Brazil]) was worked at 1245. November 21, 22, and 23 brought strong AM openings to Europe and PM propagation to the West Coast. On the 24th, 6 went to Europe in the morning and the Pacific in the afternoon. Flux levels were near 250. W2EIF worked TF6MM in the morning; N3BBI worked KH0AC and KL7's after noon. WC2K snagged KG6DX (Guam); WA3AXV worked the KH0, KG6 and the KL7's. Another similar session occurred on the 25th. On the 26th, WØRSJ, W3VIR, and WC2K all worked JA's in the afternoon. On the 26th, a solar flare inhibited propagation to the West; the 27th through 30th brought JA's into Va and a partial WH4 (Midway) QSO for N3BBI. December 1 was payday for N3BBI as Mike snagged his JA! December 2,3 brought the KH6's in to the area. N3BBI worked KH6IAA at 1851Z. New England stations including W3HQT and AA2Z enjoyed a KH6 opening with S7-9 sigs while the FN20/FM29 areas waited our turn. At 2000, WB3JYO and WC2K worked KH6HI on CW. Before the band died, XE2UZL was into this area as WC2K bagged a new one. W2HRW reports KH6 and JA propagation on the 4th. In the days following, the flux declined leaving us with daily openings to the UK and some Es to the West U.S. The 13th was the predicted peak of the Geminids shower and WC2K reports listening in on many unsuccessful tries. Rick managed a QSO at the peak with KG5VE (EM42). This result coincides with W9IP's papers which explain the dip in ionized meteor levels during peak sunspot years. On the 15th, 6 opened to Cuba and Cayman Is. with E-skip that reached 2 meters! Interference on TV channel 6 was the tip-off and WB4MJE (EL94) was into this area with S9+ sigs for an hour an 10 minutes! Wonder what is in store for January 20,21? CU on the bands!

SWAP SHOP

SELL: Icom IC-27A 144 MHz FM and IC-37A 220 MHz FM xcvrs. 25W output, w/mics, mobile mounts, manuals, orig boxes. \$150 ea. Kenwood TS-940S w/ant tuner, gen cov RX/TX, manual, carton. Like new condition \$1550.00.

CONTACT: Jack Power, W2AXU Trenton, NJ (609) 882-8811

SELL: Yasue FT-230R 2M FM xcvr. 25W output, w/TT mic. \$150.00.

CONTACT: Wayne Davis, WA2ACB Collingswood, NJ (609) 854-8780 WANTED: "Big Boy" high voltage xfrmr, 220 VAC primary.

CONTACT: Paul Drexler, WB3JYO (215) 598-3934 (H) (215) 441-1402 (W)

Drake TR-6 xcvr, (has poor RX sensitivity), with MS4/AC4 spkr/ps, cables, manual. \$200.00. Complete run of 73 Mag from #1 Oct.'60 thru #182 Dec.'75. All in good/exc condx. \$150.00.

CONTACT: Harry Schools, KA3B (215) 468-1512

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COAXIAL DIRECTIONAL COUPLER model PRDX 4420 A20, new, 500W, 50 ohm, calibration at frequencies in 5 microwave bands, spec sheet, \$35. New power supplies, regulated 12.8VDC @ 2A, \$37.50; 12.8VDC @ 7A, \$82.50. FERTIK'S ELECTRONICS, 5400 Ella St., Phila., Pa., 19120, (215)455-2121.

SAN DIEGO MICROWAVE GROUP, an amateur organization, supplies a list of 10 GHz items available. 30 MHz IF strip w/pwr supply and modulator for use with Gunn osc/det, includes PCB and TDA-7000 FM RX chip \$10. Project book covers IF systems, xcvrs, antennas, test gear, 119 pages + artwork \$15. CW EPROM IDer, includes chip w/your call, like "DE N3CX/B", etched board, \$12.00. Impatt cavity 10 GHz oscillator w/WG-16 filter, 30mW, \$30.00. 50-100 mW Gunn devices \$5 ea. 100+mW devices \$10 ea. SAN DIEGO MICROWAVE GROUP, c/o Chuck, WB6IGP, 6345 Badger Lake, San Diego, Calif. 92119.

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, Greenville, NH 03048. Tel: (603) 8778-1441.

THE JANUARY CONTEST - A CLUB SPONSORED EVENT

Wonder how many Pack Rats remember reading the sheet of club information which accompanied their application for membership. It is suggested at the top of that sheet to retain the paper, which gives a description of the Mt. Airy VHF Club. Upon becoming a member of the club, each member is presented with a copy of the club constitution. Of course, most of us have buried these documents away in a safe place and consult them rarely, if ever. This is evident in the recent participation levels of club sponsored events. Each of the documents state "All club members are encouraged and expected to participate in the club sponsored activities, which include sign-in on club nets, attendance at club meetings, and club sponsored events. The main club sponsored events of the year are (1) January VHF Contest, (2) Ladies' Night, (3) Summer contest expedition, (4) Hamarama, (5) Conference, and (6) Monthly meetings. Every member of the Pack Rats signed an application which represented a commitment and agreement to participate. Those who choose not to participate not only violate their bond with the club, but also put a drag on those enthusiastic members who work hard to keep the club healthy and have fun.

Possibly the January contest has become too much trouble, too "old hat", too hard to understand, or too competitive for you. If you have these feelings then you've probably lost touch with the reason for Pack Rat entry in the event. The January VHF SS was selected years ago as a club operating event because it is the only VHF contest which offers competition among clubs. This gives the Rats a chance to pool their resources and have fun each year as a group. Although contest leaders of the club are awarded for their contribution, the most cherished trophy of the event is the 1st place club gavel. Every Pack Rat who competes for the club owns an equal share of that trophy. Yes, it's been a run-away win for our group for many years, but that will soon change. The Rochester VHF Group, a very active club of about 60 VHF/UHF weak signal enthusiasts, are building in membership and getting 95-100% participation! Reading their newsletter reminds one of the Pack Rats several years ago, with most of the members on 5-plus bands, lots of club construction projects, and a January club score which wellexceeded 1 million points. They won the Medium Category last year and will be forced into the unlimited class this year. We are producing scores ahead of RVHFG, but with our declining number of entries, that will not be true for long. That's ok; we're finally getting some good competition. We should be encouraged by their great participation! But let's not lie down and give the title away!! Here's some ideas which may interest all of those who may have lost the drive for the January VHF Sweepstakes:

1. Visit your shack; fire up the gear and check into the nets next week. While your gear's been quiet, lot's of stations out of the area have made improvements. You'll be surprised at how far you can work these days! Clean the place up and get on for the 'test.

(continued, see: Contest Ideas)

(continued)

- 2. Have no station set up anymore? You're a great candidate for a multi operator station. Team up with your buddy and use either of your call-signs at his place. The FCC clearly states in the new rulebook that use of a friend's callsign from your shack is 100% legal. Multiop is great fun and splits the contest work between the team members.
- 3. As a single-op or multi-op station, run the club callsign W3CCX. That callsign, available for use by any member, is sure to generate some fun for you. It's gained great notoriety from the summer contests and you'll find out what callsign recognition is all about! Contact WA3AXV, Trustee of the license, if this interests you.
- 4. In the old days, you had to book a flight in order to become a "rare one" in a contest. Not so today! Load up what bands you can handle with a few light weight antennas and drive to Reading, Wilkes Barre area, or Wildwood, NJ. You'll be fulfilling a great need for your club members by activating the grid squares in which those areas lie. These grids presently have light or no activity. And there are others within more ambitious driving range. Contact WB2YEH or WC2K to receive help with your plans and get additional equipment if needed. For even a few hours invested in this type operation, you can really assist the club!

For more ideas on how you can be a winner with the Pack Rats, contact your team member or contest Chairman Bob Fisher, WB2YEH. CU Jan 20!

TID BITS

- Carl Barish, KC7ZK, Bellvue, Washington, wrote to express his sympathy for the passing of K3GAS. "I would like to formally suggest that a Pack Rat HALL OF FAME be initiated. Those so honored would command a permanent place in the Club's archives as well as a place in Cheesebits." Any suggestions or thoughts from the membership?
- Following two years of correspondence with the ARRL, especially from the Pack Rats, the League has modified the Club Competition Rules to include, "Those club members who are disabled in such a way that they are unable to travel are exempt from the two meeting per year rule but they must be regularly active in club affairs". AMEN!
- NW5E, Gary, will activate FM26 from a Virginia Beach hotel, 18 floors above the Atlantic Ocean. He will be active on 6,2,220,432,903,1296 with brick amps and single yagis. It's a contest expedition which only severe weather will cancel.
- Frank, W3UBO, and XYL reported preparing Christmas dinner for their four generations of family. Very best wishes to the Ford family!

HARRY STEIN, W3CL, RETIRES AS EDITOR

After eighteen years of dedicated service as Editor of Cheesebits, Harry, W3CL will pass the pen to Rick, WC2K. We wish to acknowledge the superb job which Harry has performed over the years and thank him for his unselfish donation of countless hours in the production of the newsletter. Rick is counting on plenty of club participation in the gathering of information for the paper. Keep the editor informed of club member news as well as technical projects and ideas. Rough scribblings and short notes are always accepted and will be edited appropriately to fit production. This is your paper; please contribute.

NEW 6 METER NEWSLETTER de Harry Schools, KA3B

Effective January 1990, the publishing of the KA3B 6 Meter Report will begin. Harry has a great reputation in producing a quality newsletter for six meter operators. This report will be a comprehensive 50 MHz bulletin which will be mailed out 12 times a year to subscribers. It will contain news of DXpeditions, activity reports, and QSL routes. Subscription rate will be \$20/year for U.S. First Class. Contact Harry Schools, KA3B, 1606 South Newkirk St., Phila., Pa., 19145.

HAM RADIO MAG TO FEATURE KALGT de Bob Atkins, KALGT

With the demise of the "New Frontier" column in QST, the limited space in W3XO's VHF column, and the increase in 50 MHz activity, regular reporting of activity on the microwave bands in QST may be limited. However, things are now underway with Ham Radio Magazine and a regular microwave column should start appearing there in February or March. The column will mainly deal with the microwave bands, but might also cover significant events on the VHF/UHF bands in the absence of coverage elsewhere in Ham Radio. The lead time on articles and news items/activity reports is about two months. Last minute items can occasionally be slipped through up to one month prior to publication. The first few columns will deal with various aspects of laser communications systems, mainly because Bob has the material together from his Pack Rat Conference talk. When things get rolling, he expects to deal with the more traditional microwave bands.

FINAL BITS

- Congrats to N3BBI, W3VIR, and WC2K who have completed 6M WAC as a result of a very fruitful November propagation period.

- NBS sunspot count prediction: December-190, January-191, February-192 March-190, April-185, May-179, June-174, July-172. TNX K3DMA.

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