PACK RATS



BEHBH 2



K RATS

CLUB CALL: W3CCX

AT. AIRÝ VHF RADIO CLUB, INC.

MT. AIRY VHF RADIO CLUB, INC., PHILADELPHIA, PENNSYLVANIA

50.125, 144.150, 220.125, 432.110, 1296.110 Mhz W3CCX - Repeater 222.98/224.58 Mhz

Affiliated Club: AMERICAN RADIO RELAY LEAGUE

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

Southampton Free Library, 987 E. Street Road

Southampton, Pennsylvania 19866

VOLUME XXVI

MARCH, 1987

NUMBER 3

ARNS

THE PREZ SEZ

Homebrew Night was a success this year with 9 entries and 3 winners. Construction techniques are improving and the cost of some projects getting lower. It is very exciting to see what can be done at home with a minimum of test equipment. It was also good to see a veteran of homebrew night join us from New Jersey. Joe, W2EIF, showed a complete 902 transverter which was on the air and operational. Hope you can come back again soon, Joe.

We are faced with another crisis concerning the 220 Mhz band. In short, the FCC would take away the bottom 2 Mhz of the band for reallocation. This would be a problem with weak signal activity since band space is already allocated for FM, Packet radio, etc. It would be very difficult to find space on 220 for all the modes we like if the FCC takes this action. Rick Connor is drafting a letter which will represent the club's position on this matter, and will send it to the FCO in proper form. There may be another write up in this issue.

That's all for now. I understand Bob, N2SB, is working on a good program for the March meeting. Hope to see everyone there.

Gary, WA20MY

THE FOUNDATION FOR AMATEUR RADIO

The Foundation for Amateur Radio, Inc., a non-profit organization with headquarters in Washington, D.C., plans to award twenty-six (26) scholarships for the academic year 1987-88 to assist licensed Radio Amateurs. The Foundation, composed of fifty local area Amateur Radio Clubs, fully funds two of these scholarships from the proceeds of its annual Hamfest. It administers without cost to the donors, seven (7) scholarships for the Quarter Century Wireless Association, two (2) each for the Dade (FL) Radio Club, the Baltimore (MD) Amateur Radio News Service and one (1) each for the Radio Club of America, the Richard G. Chichester Memorial, the Young Ladies' Radio League, the Edmund G. Redington Memorial,

(CONTINUED ON PAGE 6)

THE MT. AIRY VHF RADIO CLUB, INC.

Philadelphia, Pa. and is published monthly.

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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, provided that proper credit is given.

SWAP SHOP ITEMS - NO CHARGE

DEADLINE FOR ARTICLES IS THE GENERAL MEMBERSHIP MEETING: THE THIRD THURSDAY OF THE MONTH.

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215-355-5730

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W2EIF, JOSEPH KILGORE 609-783-9478

CLUB HISTORIAN:

W3CL, HARRY B. STEIN

MONDAY NIGHT NETS
7:30 PM - 50.125 MHZ
8:00 PM - 144.150 MHZ
8:30 PM - 222.98/224.58 MHZ
8:45 PM - 220.125 MHZ
9:00 PM - 432.110 MHZ
9:30 PM - 1296.1 MHZ

MET CONTROL
W3CL
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K3CL
K3GAS
K3GAS
KS2T
KS2T

PACK RAT REPEATER 222.98/224.58 MHZ/ W3CCX LOCATED IN CHURCHVILLE, PA.

PRESIDENT: WAZOMY, GARY HITCHNER

VICE-PRES: N2SB, BOB COOK COR.SECY: W3CXU, JOHN ALLEN REC.SECY: WA3AQA, WALT ZUMBACH TREASURER: K3GAS. DOC CUTLER

DIRECTORS: WB2RVX, MIKE GULLO (EX-OFF)

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WB2VLA, DAVE POWER (2 Yrs)
N3CX, DAVE HACKFORD (1 Yr)
WA3JUF, DAVE MASCARO (1 Yr)



THE AMERICAN RADIO RELAY LEAGUE

OST

HUGH A. TURNBULL, W3ABC

Director, Atlantic Division

6903 RHODE ISLAND AVE. COLLEGE PARK, MD. 20740.

(301) 927-1797

1-302-478-2757

AMATEUR

and ADVANCED "Gisele"

K3WAJ

COMMUNICATIONS

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By Harry Brown, W3IIT

MARCH

- 3 Birthday of Alexander Graham Bell
- 8 Westchester Emergency Communications Association 3rd Annual Hamfest at the Westchester Community College in Valhalla, N.Y. Talk-in on 147.66/.06.
- Packrat Board of Directors Meeting at the QTH of W3CL at 8:00 P.M. Call: 215-887-5052 for directions. 2087 Parkdale Avenue, Glenside, Pa.
- The Splitrock ARA is sponsoring their 2nd Annual evening Hamfest at the Drew University Center, Rm. 107, Rte. 24, Madison, N.J. Setup at 6 P.M. Doors open at 7. Talk-in on 146.985.
- 14-15 Maine QSO Party. See Page 91 of the March 1987 Issue of QST.
 - March Packrat Meeting at the Southampton Free Library on Street Road, Southampton, Pa. The meeting starts promptly at 8 P.M.
 - 21 +/- 2 weeks. Optimum time for TE propagation.
 - DVRA Hamfest at the N.J. National Guard Armory, Eggerts Crossing Road, Lawrence Township, approximately 2 miles N. of I-95, Rte. 206 interchange. Talk-in on 07/67.
 - 24 EME Perigee
- VE Exam by the Warminster ARC. Contact: Tom Michaud, WA3TQJ, Box 404, Warrington, Pa. 18976, (215) 343-3494.
- Springfest '87 will be held at the 4H Fairgrounds near Egg Harbor City, N.J. Talk-in on 146.985 and .52.
- The Chestnut Ridge Radio Club will sponsor their 10th Annual Ham Radio Flea Market at the Education Building, Saddle River Reformed Church, East Saddle River Road and Weiss Road. Admission \$1.

LADIES NITE - MAY 30, 1987

- DUES ARE DUE -

* * *

W2LXY - Walt - Chatham, N.J. K3BRS - A1 - Lanham, MD. WB2JHG - Mark- Medford, N.J. VISITORS MEETING FEBRUARY 19, 1987

W3AJS - Ed - Oreland, Pa.

N3EXA - Brian, Doylestown, Pa.

KU3A - Bill - Dublin, Pa.

John Ferrante - Cherry Hill, N.J.

TELEPHONE CORRECTION

N3BBI - Mike Pandolfo 717-325-3580 * * *

NOTE: Congrats to Rick, WB2NPE on making WAS on 2 meters recently.

Cheese-Bits subscription rates will go from \$3 to \$5 starting in June 1987. This to cover postage and printing costs.

SCHOLARSHIPS

The Dayton Amateur Radio Association is now accepting applications for its Annual \$1,000 Scholarships, Licensed amateurs graduating from High School in 1987 are eligible. Please make this known to any amateurs in your area who may qualify. For further information and application forms write DARA Scholarships, 317 Ernst Ave., Dayton, Ohio 45405.

HOMEBREW NITE PARTICIPANTS

K3GAS - Sona Light

N3CX - 093 Xvtr; 432 Linear Amp, 1296 - 2X2C39 Amp.

W2EIF - 903 Xvtr and 2C39 Amp; low level watt meter.

WA3JUF - 432 Amp; 100-500 Mhz amp; 3456 amp. Universal xvtr pwr/sply.

WA3AXV - 903 xvtr and 20 W, amp; W6P0-903 preamp.

WA20MY - Converted fair radio filters; 1296 - 2304 - 3456 (3 bands) xvtr.

W3GXB - Portable-multiple 12.6V - 5 and 8 amp. pwr/sply - professional construction.

WB2JHG - Mark Adams - visitor. 903 xvtr.

N2SB - 903 "Rover" 60 watt xvtr.

WA3NUF - 2304 preamp.

Judges - W3FQD, W3ZD and WA3NUF.

Winners: Most Unique - K3GAS

Most Ambitious - WA20MY

Construction Techniques - WA3JUF

TID BITS

Sunspot No. for January 1987 = 9.8. Smoothed No. for July 1986 = 13.8.

The Central Jersey Engineering Council presented "Appreciaton Award - Education" to BB Wentzel, W2HX. Congratulations BB.

Harry Schools, KA3B will be operating from VPP, Bermuda in the near future on 6 meters that is, What dates Harry?

Harry, K3LOM reports that WB4MYM near Raleigh, NC (FMO5) runs a net on 50.2 Mhz 8 A.M. on Sunday; 8 P.M. Monday, Wednesday and Friday.

Correction please - Rick Rosen, K2RR QTH is Mason, New Hampshire - Not N.J.!! WA3AAJ, Jim Ward, our San Diego, CA Pack-Rat reports the VHF/UHF bands are very quiet except for FM Repeaters and Packet.

W3ICC, Harford Drexler, executive of the EMA offices, Courthouse, Doylestown, Pa. reported via the Bucks County Courier Times that emergency communications was required during the first big snowstorm in January. The ARES was on stand-by and assisted during the storm. (Thanks Ron, WA3AXV).

Randy Bynum, WB2SZK, our San Jose, CA. Pack-Rat, reports keeping very busy out there along with his regular job he does consulting based on his RF experience. Also, he and Della have an outside business going. Good luck to you folks.

Larry Hayelwood, W5NZS, Oklahoma City, writes that he would like to join the Pack-Rats thinks an associate membership would be in order - he is ex K3KBV. Say ehllo to the OM Larry.

Congratulations to Rose and Harry Brown, W3IIT who became grandparents on Feb. 11, 1987.

SWAP SHOP

FOR SALE: KW pwr sply - H.V., screen & bias w/variac & control unit w/metering in 5 ft. enclosed rack \$50; Four 21 el. 70CM F9 F8's w/H-frame, new F9F8 four - way divider & four 9913 phasing lines (one antenna damaged)\$135. 40 ft. of Rohn #6 tower w/hinge base & house bracket \$30.

CONTACT: Mike, N3BBI

Phone: 215-767-5891 - 8AM to 4PM

717-325-3580 - 5PM to 8PM

FOR SALE: Rohn HDBX40 - 40 ft. tower (freestanding) no base, good cond. \$175. Hy-gain 204BA 4 el. 20 mtr. Monobander - good condx.\$120. Alliance HD73 ant. rotator - Good condx. \$55. AM6154 amp. converted for 2 mtrs; 240 VAC w/plugs - 500 watts out - good cond. \$250.

CONTACT: Frank, K3TRM

.Phone: 717-636-0227 after 4 PM.

FOR SALE: Two - 13-509 midland - 220 Mhz xcvrs - simplex 223.5, Pack-Rat rptr, Trevose rptr, Lancaster rptr. Two - FM21 Clegg - 220 Mhz xcvrs.

WANTED: 440 Mhz xcvr. unit.

CONTACT: Jack Power, W2AXU Phone: 609-882-8811

COMMERCIAL AD

FOR SALE: 144 Mhz Tempo 2002 600 watts (approx.) could use tubes - \$500 firm.

CONTACT: Herb, K2LNS

Phone: 717-472-9245

WANTED: Cavity filter for 52.5 Mhz.

CONTACT: Harry Schools

1606 S. Newkirk St. Phila., Pa. 19145

FOR SALE: Tubes, variable & electrolytic caps (small and large); speakers - 1g. and small; Hallicrafters SX110 rcvr, \$60; R48-220 Mhz rcvr. \$12; 220 Mhz xmtr (Barry rig) \$10; Telephone answering machine tapes,

magazines, QST, 73, Ham Radio.

CONTACT: Doc, K3GAS

Phone: 215-635-1078.

FOR SALE: Kenwood Model TH-41AT with protective case, touch-tone pad, charger and extra battery - perfect condition \$165.

CONTACT: W2HX - BB Wentzel
318 Gardner Avenue
Trenton, N.J. 08618

Phone: 609-393-4823
FOR SALE: Drake TR-6 for parts,w/P.S. - \$175
Drake SSR -1 Gen.Cov. rcvr - &150. RCA CR91A
Gen.Cov. rcvr - \$75. Drake TC-2 w/rcv.conv. &
pre-amp - \$150. B&K 1801 Freq. Counter - \$90.
2 - 5e1. 6 mtr. beams, each \$50.

CONTACT: K3WRD - Phone: 215-674-3892

LOOP LAGIS: 902 Mhz and 1296 Mhz \$77 kit, \$93 assembled and tested. 2304 Mhz \$67 kit and \$80 assembled. Also, 2 and 4 way power dividers and stacking frames. LINEAR AMPLIFIERS: 1296 10W in 35 watts out \$295, 1W in 18W out \$245. Call for special Pack Rat discounts and prices on complete arrays! New!!! Microwave Transverters and preamps by LMW ELECTRONICS. 2304 Mhz deluxe transverter Model 2304 TRV2D; 144 Mhz I.F. Power out 2 watts, includes separate GaAs FET preamp, N.F. 1 dB and built in T/R sequencing circuit, relative output meter and built in I.F. Attenuator to match inputs from 100mW to 10 watts. Price complete \$569; 1296 Mhz deluxe transverter, model 1296TRV6D similar to 2304 unit 6-7 watts out, .7dB N.F. price: \$489. Stripped down versions available at lower cost also available in kit form. 902 Mhz version coming soon. Universal Local Oscillator Kit model ULO. Multiple outputs in 1 and 1.2 Ghz range depending on xtal. \$33.75 less xtal. Write to obtain complete catalog. DOWN EAST MICROWAVE, Bill Olson, W3HQT, Box 1655A, RFD #1, Bernham, ME 04922, Phone: 207-948-3741.

ANOTHER DEFINITION OF "HAM"

From a PR article on Amateur Radio in the New York Times - "HAM traces its roots to a magazine, Home Amateur Mechanic, that 75 years ago devoted an edition to assembling home radios. The devices were eventually named HAM, after the magazine's initials. (tnx Phil, WA3NUF)

PHIL-MONT TO SPONSOR MEETING OF RADIO CLUBS W3PWG

Bob Haacke, KA3DVY, will conduct a briefing for all radio clubs on the subject of the National Weather Service's SKYWARN program. The meeting will be held in the Lecture Hall at the Franklin Institute on Wednesday, 25 March 1987 at 7 PM.

Bob is the ARRL Division Emergency Coordinator, and was in charge of planning the National Disaster Medical Drills held in Phila, in previous years, (tnx "the Blurb")

ARRL BULLETIN NR 13 FROM ARRL HEADQUARTERS NEWINGTON CT FEBRUARY 10, 1987 TO ALL RADIO AMATEURS: FCC today released the report and order in PR Docket 86 161, Novice Enhancement. The rules become effective 0001 UTC March 21, 1987, a Friday night, local time. Specific rules changes are -- 1. Novices and Technicians may operate 28.1 to 28.5 Mhz. using CW modes from 28.1 to 28.3 and CW, and voice modes from 28.3 to 28.5 Mhz. Novice and Technician control operators are limited to 200 watts output in this band, but other licensees are not similarly limited. 2. Novices may use up to 25 watts in the 222.10 through 223.91 Mhz band, with all authorized emissions. 3. Novices may use up to 5 watts in the 1270 through 1295 Mhz band, with all authorized emissions. 4. No amateur station at which the control operator or station licensee holds a Novice class operator license shall be in repeater, auxiliary, or beacon operation. 5. Two examiners will be required to administer future Novice exams, which shall consist of 30 questions. FCC Form 610 will be revised to provide for certification by two VES. 6. Present Novice and Technician licensees are grandfathered into the new privileges. 7. Element 3 is divided into two parts, 3A and 3B, with each examiniation to consist of 25 questions. Present Technician licensees will be given credit for having passed both elements. In the future, upgrades to Technician will only have to pass element 3A and future Technicians upgrading to General will have to pass both elements 1B. 13 WPM, and element 3B. The complete text of the new rules will appear in April QST.

ARRL BULLETEN NR 16 FROM ARRL HEADQUARTERS NEWINGTON CT FEBRUARY 12, 1987 TO ALL RADIO AMATEURS: On February 12, 1987, the FCC released a notice of proposed rule making, General Docket 87 14, that proposes to allocate 220 to 222 Mhz on an exclusive basis to the land mobile service and 222 to 225 Mhz band is underutilized, and that the land mobile service has needs that can be met in this region of the spectrum. Therefore, the commission is proposing that the lower 2 megahertz, 220 to 222 Mhz, be reallocated on a primary basis to the land mobile service for both Government and nongovernment operations and the existing primary allocations to the amateur, fixed and mobile services be deleted. Accordingly, the FCC proposes to allocate the remaining 3 megahertz, 222 to 225, to the amateur radio service on a primary basis. Comments on this proposal may be filed on or before April 6, 1987. Reply comments may be filed on or before April 21, 1987. See the ARRL letter and QST for further details.

(NOTE: The club is respoding to this FCC Docket. Rick Conner, WB2NPE is preparing the document. Members are urged to do so also including writing to your Congressman and Senators. An ARRL news flash appears in this issue of cheese-bits)

THE FOUNDATION FOR AMATEUR RADIO CONT.

the Columbia (MD) Amateur Radio Association and the Vienna (VA) Wireless Society. Also this year, there will be three one-time awards in memory of recent Silent Keys.

Licensed Radio Amateurs may compete for these awards if they plan to pursue a full-time course of studies beyond high school and are expolled of have been accepted for enrollment by an accredited university, college or technical school. Most of the scholarships require the applicant to hold at least an FCC GENERAL Class license or equivalent. The awards range from \$350 to \$900 with preference given in some cases to residents of specified geographical areas or the pursuit of certain study programs.

Additional information and an application form can be requested by letter or QSL card, postmarked prior to May 31, 1987 from: F A R Scholarships, 6903 Rhode Island Avenue, College Park, MD 20740.

The Foundation for Amateur Radio, incorporated in the District of Columbia, is an exempt organization under Section 501(c)(3) of the Internal Revenue Code of 1954. It is devoted exclusively to promoting the interests of Amateur Radio and those scientific literary and educational pursuits that advance the purposes of the Amateur Radio Service.

* * *

ADDITIONAL TID-BIT

It was nice to welcome ex-prez Dick Huntzinger, W3FQD and WA3IWT, Rich Prim at the February Meeting.

MT. AIRY VHF RADIO CLUB INC. "THE PACKRATS" JANUARY VHF SWEEPSTAKES CONTEST

1987

AMATEUR CALL	} }	5 MH	O Z	144 MHZ		MH 55		43 MH		90) MH;		129 MH		2304 2304		3456 MHZ	10 GHZ	TOTAL QSO PTS	TOTAL SRIDS	CONTE SCOR
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MT. AIRY VHF RADIO CLUB INC. "THE PACKRATS" JANUARY VHF SWEEPSTAKES CONTEST 1987

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TOTAL LOGS SUBMITTED

60

CLUB ASGREGATE SCORE 1615317

HINTS AND BITS

Use fuses between your high current power supplies and your amplifiers and transverters. The transverters and other equipment have reverse polarity diodes inside that protect against the accidental reversal of the supply leads.

Without an in-line fuse, your Astron 20 Amp power supply will pump it's full current into the transverter which will certainly blow the diodes and many other semiconductor devices.

Replace the 50 cent fuse OR the transverter.....it's your decision.

DOWN **E**AST MICROWAVE

MICROWAVE ANTENNAS AND COMPONENTS

BILL OLSON W3HOT

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