

PACK RATS'



PACK RATS

CLUB CALL: W3CCX

MT. AIRY VHF RADIO CLUB, INC.

CHEESE BITS



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

50.125, 144.50, 432.110, 1296.025 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, 947 E. Street Road
Southampton, Pennsylvania 18966

ARNS

VOLUME XXIV

APRIL, 1982

NUMBER 4

THE PREZ SEZ

The Annual Club Banquet will be here soon - Saturday, April 24th and I hope that you all can make it. The Banquet, formally called Ladies Night to thank the XYL's for putting up with us especially during contests - also honors the outstanding work of the club members. In addition to this, it's a good time to get out on a Spring evening and visit, chat, drink and relax with your friends. It's a time to review the past year and to look forward to another year together as a group. Hope to see you there!

Dick, W3FQD, gave an interesting talk at the March meeting on home computers - he's been very busy since retirement. It's impossible not to learn something when Dick is talking - he's a natural teacher and has the ability to explain that leaves everyone with a clear understanding. Dick lectures with chalk in one hand and an eraser in the other, but he swears that he leaves the words written on the blackboard longer than 5 seconds.

With Rochester preliminary score published in the Ra Ra Rag, it looks like the Packrats did it again with a lead of approximately 350,000 points. We're happy to have won again but it does look like the weather must have been tough on them this year. We wish them better luck next year and hope they'll keep us pressing again next January.

73, Harry, W3IIT

PLEASE NOTE CHANGE OF DATE FOR THE DIRECTORS MEETING FROM APRIL 8 TO APRIL 1 !

* * *

Proposed Constitutional Amendments

Submitted by the AD HOC Constitution Committee (K3IUV/K3KTY)

1. ARTICLE VIII MEETINGS, add section 5 as follows: (5) Business considered. - Decisions or business requiring the attention of the Board of Directors or the general membership shall only be made at a regular or special meeting where proper notification of the meeting has been made. Notification of special meetings shall include the reason for the meeting, and shall be made to all members of the board or the general membership as applicable.

2. ARTICLE II OBJECTS, revise as follows: In title and heading, change "Objects" to "Objectives".

3. ARTICLE III MEMBERSHIP, section 1, revise as follows: Change "Objects" to "Objectives".

Pack Rats CHEESE BITS is a publication of 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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609-783-9478

CLUB HISTORIAN:

W3CL, HARRY B. STEIN

MONDAY NIGHT NETS NET CONTROL

7:30 PM - 50.125 MHZ	W3CL-W3HQ7
8:00 PM - 144.150 MHZ	W2EIF
8:30 PM - 222.98/224.58	K3GAS
9:00 PM - 432.1 MHZ	K3IUV-WA2DPU
9:30 PM - 1296.025 MHZ	W3CXU

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CALENDAR OF COMING EVENTS
Syllabus by Lee, K3MXM

APRIL

- 3 Sunday, Flemington, N.J. Hamfest, Hunterdon Central High School
- 4 Palm Sunday
- 3-4 International EME (Earth-Moon-Earth) Contest.
- 1 Board of Directors Meeting - QTH - W3CDE, Don Biresch, Tabor Road, Ottsville, Pa. If lost phone 847-5065.
- 8 Passover Begins
- 9 Good Friday
- 11 Easter
- 12 Titanic strikes iceberg and sinks - 1912
- 15 General Club Meeting - Southampton Free Library, 8:00 P.M. Mario's Raffle, Frankie's Silent Auction. Program: Space TV - Bert Soltoff, K3IUV (Bert is the fellow responsible for the TV system that was put on the Moon). An open meeting to all members and their friends. Should be most interesting. Refreshments - The Mario Raffle, Frankie's Silent Auction.
- 18 Ernie Pyle killed 1945 - How many of you remember the name of Ernie Pyle???
- 17-18 The Seventh Trenton Computer Festival - Trenton State College. 10 to 6. Large outdoor flea market. Commercial Exhibits - contests, Forums special short courses - Graphics Theater.
- 19 National Library Week
- 24 Ladies Nite - Warrington Motor Lodge. Rte. 611, Warrington, Pa. The fun starts at 6:30 p.m. with an Open Bar for one hour. Dinner follows (you will receive details under separate cover). Nostalgia movies, awards, then Doc may open the bar again for a bit. Dancing from 9 until. Special favors for the Ladies - this time really special. Come out for an evening of fun and friendship.

* * *

NOTICE

The Seventh Trenton Computer Festival April 17-18, 1982 Trenton State College, Commercial Exhibits, Forums - ARRL Representative and booth will be there - Packet radio - Ham radio and computers. IEEE student conference - Sunday 10 A.M. to 12 Noon. Special session on computers and TVRO Sattelite. Registration fee for both days and outdoor flea market \$5.00. Contact: Alan Katz, K2UYH.

* * *

AMATEUR RADIO FELLOWSHIP MEETING

Doug Crompton, WA3DSP, will speak on "Home Computers" to the Greater Northeast Phila. Amateur Radio Fellowship which meets on Monday, April 26th, 7:00 P.M. at the Northeast Regional Library, Cottman Avenue and Oakland Street (opposite Gimbel's). Admission is free and there is ample free parking opposite the library. For further information, call either Al, W3AYJ, 725-2869; Joe, K3RFL, 698-8051 or Dan, K3HES, 338-7946.

NEW PRODUCTS OF INTEREST TO HAMS

By Lyn, W3NSI

1. POWER LINE FILTERS: R.L. Drake Co. is manufacturing 2 line filters to be used to protect circuits in solid state equipment from damage. Both the LF 2 and LF 6 offer surge suppression on power line transients and capacitive and inductive components to knock down RF interference to TV and computer units. The LF 2 is rated for 8 amps and has no outlets installed. The LF 6 is rated at 15 amps and uses 3 separately filtered outlet sets for increased isolation. Price LF2 - \$39.95 LF6 - \$59.95.

2. PRINTED CIRCUIT ETCHING SYSTEM: Stellmaker Enterprises is advertising a power etching system that uses a pump to keep the fluids agitated in the PC vat. Unit will handle boards up to 6" x 6". Price \$34.50 +\$3.50 ship., 250 Pequot Trail, Westerly, R.I. 02891

3. AUTOPATCH: The RWD Co. has available their Novax mobile connection, wired or kit form. This small unit (5 x 6 x 2) can be connected to your base station on 2 or 220, or 440, FM, and your touchtone telephone. Your rig in the car can then be used on simplex to dial up numbers remotely. Even an HT in the backyard could be used. A ringback (reverse) option is available. A built in timer limits calls to 3 minutes. Price \$150 kit; \$200 wired - Ringback \$30 kit, \$40 wired. Oriskany, N.Y. 13424

* * *

VHF/UHF REPORT

By Joe, W2EIF

The VHF/UHF bands have settled down to their normal inactivity. The DX season on 6 meters has apparently ended for this section of the country.

There have been several aurora's one of which produced contacts to the Midwest up thru 432 Mhz.

These occurred on Monday nites during the Packrat net operation. The last one on March 1 was strong and after dropping out earlier in the evening, reappeared around midnite with good activity thru 432. The Spring season should produce some good coastal openings along with the warm days and cool nights.

NOTE: VE3ONT requests schedules on all bands up to 1296 Mhz for the June 12/13 1982 VHF QSO Party. Will be located 35 miles West of Toronto - get in touch with VE3GSS.

* * *

VISITORS MARCH 18, 1982 MEETING

KF3R - Ed Devlin, Cornwells Heights, Pa.
KA2NYF - Janet Cormaney, Deptford, N.J.
WB3EFO - Ed Lee, Huntingdon Valley, Pa.
W3AJS - Ed Keener, Oreland, Pa.
AB3A - Jake Brodsky (Drexel U.) Phila., Pa.
Vince Pasicznk (Temple U.) Phila., Pa.

VOTED TO RETIRED STATUS

WA3EPS - Mort Mazer
W3PST - Woody Haldeman
K3VEQ - Joe Silverman

CHANGE OF ADDRESS

K3ACR, Richard Pattison
717 Paxton Avenue, Wyncote, Pa. 19095
215-885-3830

* * *

TID BITS

Sun Watcher, Jack Power, W2AXU, reports the Sunspot No. for February 1982 = 162.6. Smoothed Number for August 1981 = 140.4.

Our first President, Charles Clement, W3LBH (Silent Key) is remembered by Bob Lawson of Newtown Square, Pa. who has W3LBH call for the past 10 years. He has been on 2 meter FM lately and shook up some of the gang who thought Charley had come back for a visit!

SWAP SHOP

FOR SALE: S.I. 27 el. loop Yagi for 1296 Mhz-used, needs a number of loops replaced (Mat'l furnished) has plate for end mtg., driven el., cable & connector intact. \$20.

WANTED: Microwave modules - MMT 144-28. KLM #144-148 - 12 el. antenna, w/balun, 50 ohms.

CONTACT: John Allen, W3CXU
1119 Highland Avenue
Abington, Pa. 19001
Phone: 215-886-4109

FOR SALE: 2 mtr. xceiver - Drake TR 22 with xtals for 6 channels \$70. SSB xceiver - swan 270 - works on AC or 12V. D.C. \$210.

CONTACT: Jim Beaver, W3AHZ
Phone: 215-886-8180

FOR SALE: HW-16 with HG10B VFO and accessories.

CONTACT: M. Zuger Mayer (Sparks), W3GVR
Phone: 215-357-2865

FOR SALE: Swan-120 (20 mtrs) with pwr supply. Excellent condition. \$125.

CONTACT: Chas. Lustick, K3HSS
Phone: 215-342-4398

FOR SALE: RCA AR88 General coverage rcvr - very good condition \$125.

CONTACT: Max Salmansohn, W3JZ
Phone: 215-886-1625

FOR SALE: Here is a wonderful opportunity to fill your junk box or to procure new parts, speakers, phono needles and cartridges and other things too numerous to mention at real bargain prices. Listed below are excellent pieces of test equip: Lee condenser and leakage tester. Semcore tube tester TC 136. Eico sine & Square wave audio generator #377. Eico signal tracer model 147A. Midland field strength meter. Stereo level indicator. MVRA swr and field strength meter.

RCA Isotap WP25A. RCA RF signal generator WR50B. RCA sine & square wave audio generator WA504A. RCA color bar generator WL502A. RCA marker generator WP89A. Wintronic intermittent condition analyzer #828. Eico signal tracer #147A. RCA sweep generator WR59C. Paco grid-dip meter model G-15W. Blonder tongue ultravert model BTV25. Eico cathode ray tube checker. Manuals for all.

Sanyo closed circuit TV camera & monitor \$150.

CONTACT: Doc Cutler, K3GAS
Phone: 215-635-1078

FOR SALE: Swan linear amp. Mark 6B-2000 watts PEP - manual \$300. You get Swan 210 VFO with purchase of amplifier.

CONTACT: Earl Downs, WA3QWO
Phone: 215-DI 3-0459

FOR SALE: Johnson Viking 352 conversion to 10 mtrs. SSB, comes with mike, pwr supply connection, Sam's fotofact book on 352 and complete data on xtals giving frequencies \$75. DSI Model 3550, frequency counter, 50 MHz to 550 MHz with A.C. adapter (9 volts), antenna, DSI trap. Factory wired, factory packed. Brand New Never used! \$75. (Both item work - sold on that basis. Terms - Cash and carry from my QTH. No pwr splys with any unit)

CONTACT: Louis H. Roth, W2DKH
116A Lowell Lane
Rossmoor, Jamesburg, N.J. 08831
Phone: 609-655-2825

WANTED: 2 mtr beam - 7 or 11 el. will pay about \$20. ship UPS.

CONTACT: K4AWS, A. Slapkowski
P.O. Box 15 Old Rt. 301
Sumterville, Florida 99585

FOR SALE: Collins KWM-2 with waters Q-multiplier/notch filter, and 136B - 2 noise blanker installed. 516F-2 power supply and 312-B VFO/speaker unit. Manuals. Excellent condition. Collins 75A4 receiver with extra filters. Collins 70E-8A PTO with dial assembly. Collins 70E-17 PTO (2.5-3.5 Mhz) Collins PTO (1-1.5 Mhz).

CONTACT: Harry Stein, W3CL
2087 Parkdale Avenue
Glenside, Pa. 19038
Phone: 215-887-5052

Add to the Holmesburg Amateur Radio Club business Card AD on the last page ----

REPEATER FREQUENCY = 146.685 MHz

* * *

* * *

TID BITS CONTINUED

Pack-Rat Monday nite nets are all on SSB except the 220 net which is FM on our repeater - 222.98/224.58 - some of the stations on 1296 report in on CW. This notice is made for our friends who care to check-in.

Health and Welfare - Ralph Alexander back home after surgery; Jim Bowman, K3OBY in the Jeannes Hospital expects to undergo shoulder surgery. Will keep you advised.

January VHF Contest results from Rochester as follows as of February 12; 167 logs submitted with an aggregate point total of 762,482.

* * *

PRESS RELEASE

The Foundation for Amateur Radio, Inc. a non-profit organization with headquarters in Washington, D.C., plans to award nine scholarships for the academic year 1982-1983. The Foundation, composed of fifty local area amateur radio clubs, fully funds two of these scholarships from the proceeds of the Gaithersburg (MD) Hamfest. It administers, without cost to the donors, two scholarships for the Quarter Century Wireless Association and one each for the Richard G. Chichester Memorial, the Radio Club of America, the Young Ladies' Radio League, the Edmund B. Redington Memorial and the Amateur Radio News Service. The last named award is new this year.

Radio Amateurs holding at least an FCC General Class License or equivalent may compete for one or more of these awards if they plan to pursue a full-time course of studies beyond high school and are enrolled or have been accepted for enrollment in an accredited university, college or technical school. The scholarship awards range from \$300 to \$900, with preference given in some of them to residents of specific geographical areas or the pursuit of certain study programs.

Additional information and an application form can be requested by a letter or QSL/postcard, postmarked prior to May 31, 1982 from: Hugh A. Turnbull, W3ABC, 6903 Rhode Island Ave., College Park, Maryland 20740.

The FOUNDATION is devoted exclusively to promoting the interests of Amateur Radio and to the scientific, literary and educational pursuits that advance the purposes of the Amateur Radio Service.

* * *

FROM W5YI REPORT

PENNA. HAM GETS STATE TOWER LAW INTRODUCED

Legislation introduced into the Pa. House of Representatives seeks to amend Public Law 805, No. 247. This law, also known as the Pa. Municipalities Planning Code, entitles certain cities, boroughs, incorporated towns, townships and counties to "Plan their development and to govern the same by zoning, subdivision and land development ordinances..." The new amendment would specifically exempt amateur radio antennas and towers from inclusion.

It all started back in Spring 1981 when Robert N. Wilderman, K3SRO, of Lansdale, Pa. was sued by a local real estate developer to dismantle and take down his 50 foot tower and 3 element yagi beam. Bob had a building permit to put up the tower, but a deed restriction in his subdivision (which he did not know was there "in the fine print") barring antennas which protrude more than 15 feet above the roof. Wilderman felt he was being singled out for enforcement since 35 or 40 other covenant violations also existed in his Meadow Glen tract.

While changes in the state law will have no affect on privately entered into agreements, it is refreshing to see antenna and tower laws being introduced which are advantageous to the radio amateur. Such is usually not the case. The new Section 603.1 of Public Law 805, if adopted, will give amateurs a "Bill of Rights" in the erection of antennas and towers.

A LOOK AT SMOOTHED NUMBERS

By John B. Power, W2AXU

Sunspot number records go back many years, to naked eye accounts by Oriental observers as early as the fourth century B.C. However, standardized records have only been kept by the Zurich Solar Observatory since 1749.

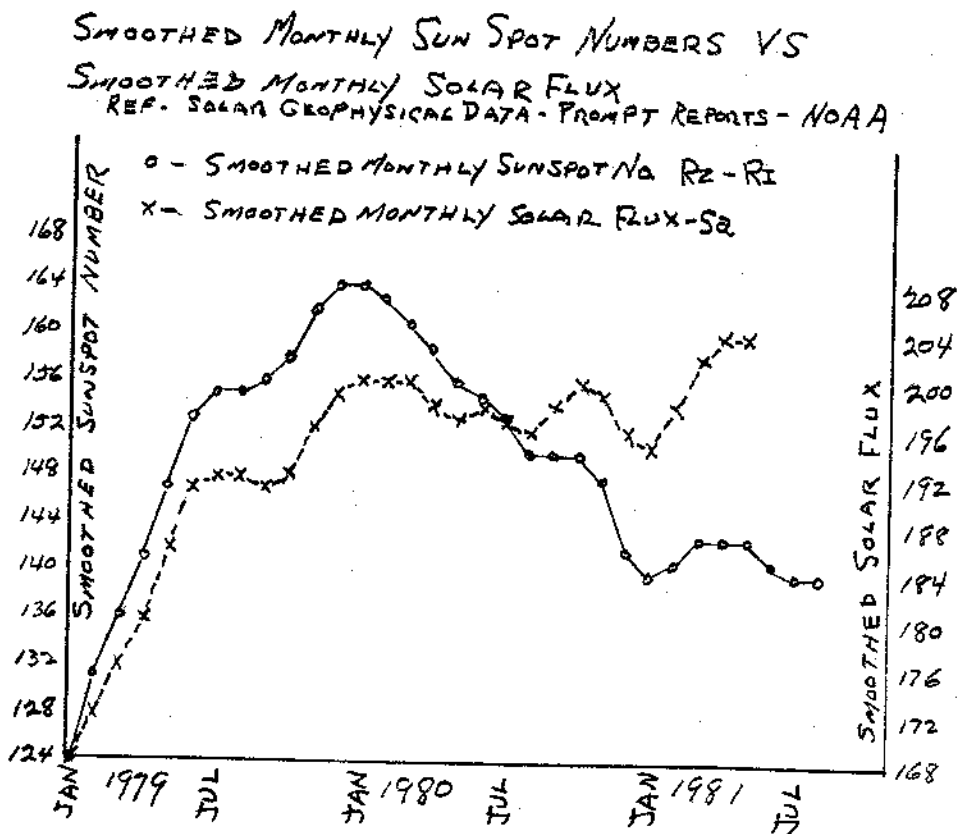
Solar Flux data is a new means of observing the Sun's activity. Rather than visually counting the Sun's spots, the Sun surface is scanned by radar techniques at 2800 MHz and a number known as the Solar Flux is determined. These daily numbers have been available since 1947.

Sunspot and Solar Flux numbers are provided daily. These daily numbers are averaged monthly and that number is known as the Monthly Mean. The Monthly Mean is applied to a formula and a 12 month running smoothed number emerges. It is the smoothed Sunspot number, plotted over a long period of time, which exhibits the well-known solar cycle variation, and which is used to define the Sunspot cycle.

Below is the curve of the smoothed Sunspot numbers plotted against the smoothed Solar Flux numbers from January 1979 to August 1981 for Sunspot numbers and May 1981 for Solar Flux numbers.

It is interesting to note the similarity of the curves to March 1980. From that point, the Solar Flux curve has a mind of its own and goes off by itself.

The Solar Flux probably being a truer measure of solar radiation (that is, radiation that causes the effect noted on radio propagation), the anomaly noted in the Solar Flux curve could explain why six meter propagation was so extremely good during the months following March 1980, and including the Fall of 1981 and Winter of 1982. If the trend continues, six meter propagation may still be good in the Fall of 1982. We won't be able to make a comparison until the Summer of 1983 when the figures are available.



W5YI REPORT CONTINUED

No longer will Pennsylvania cities be allowed to outlaw or restrict them by zoning ordinance. The new section specifically states...."No zoning ordinance shall exclude or restrict the erection, location or height of an amateur radio antenna, or the tower supporting such antenna. An ordinance may regulate the construction or maintenance of an antenna tower, but only to the extent it is necessary to protect life or property."

The bill will take effect in six months after passage and could set a precedent for other states to follow. It is currently being considered by the Pennsylvania Committee on Local Government. Bob Wilderman, K3SRO, contacted his state representative (Benjamin H. Wilson) to get the proposal written and introduced as a state bill. K3SRO is also working on another bill that will also help amateurs and property owners alike. This bill requires all deed restrictions (written in plain English) to be given to a home buyer before any deposit is placed on any property to be purchased. This way, the buyer is fully aware of any existing covenants before any funds are expended. While it may be too late for him, it will save other amateur radio operators from the anguish that Bob has gone through.

NOTE: Pennsylvania Hams - Please get in touch with your state representatives. K3SRO sent the complete Bill to us. It is House Bill No. 1779. This note is from the Cheese-Bits Editor.

* * *

U.S. DEPARTMENT OF COMMERCE, National Oceanic and Atmospheric Administration

Dear Colleague:

The President's FY 1983 budget, submitted to Congress on Feb. 8, 1982 contains a decrease which may have an impact on you as a user of the services of NOAA's Space Environment Laboratory (SEL) and its Space Environment Services Center (SESC). Specifically, the budget calls for a reduction of NOAA funds for solar-terrestrial research and services of \$3.1 M and 34 positions, relative to the FY 1982 levels. At the proposed level of support, it would not be possible to carry on many of the present activities of SEL, in particular, all space-weather research and related systems development would have to be terminated when the new budget is implemented.

The planned procurement of the new computer-based, real-time data system (SELDADS II) would not take place. Real-time, solar-terrestrial services currently provided by SESC would have to be curtailed during FY 1983. These services include, for example, 24-hour/day alerts and forecasts, the WWV broad-casts of the geophysical alerts, and the weekly "Preliminary Report and Forecasts of Solar Geophysical Data." The primary goal of the Laboratory in FY 83 would be to maintain a viable real-time, solar-terrestrial data base, as the necessary foundation for remaining and future services. Only a minimal level of funds and personnel would be available for this purpose.

We will be discussing the impact of the proposed budget with the major users of the services to determine if they can contribute to continuing the most essential services, or if this function can be picked up by another agency. If these arrangements cannot be made, then we face the possibility of phasing out the present services as outlined above.

SEL would appreciate comments from its users about the impact of the reductions of services outlined above. Additional comments about the minimum level of services required by users will be helpful in establishing the service priorities during FY 1983.

A Laboratory Fact Sheet is included for your information. Please feel free to call us if we can help in any way or provide more information. We can be reached at FTS 320-3311 or commercial number (303) 497-3311.

Donald J. Williams, Director
Space Environment Laboratory

Harold Leinbach, Acting Director
Space Environment Laboratory
February 27, 1982

(Submitted by John Power, W2AXU)

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