

# PACK RATS'



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# CHEESE BITS



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, 947 E. Street Road  
Southampton, Pennsylvania 19866

ARNS

VOLUME XXVI

JANUARY, 1984

NUMBER 1

## THE PREZ SEZ

As we look back on 1983, it was an outstanding year for the Pack Rats: (1) Another win in the January Contest (2) the increase in attendance to our regular meetings (3) a whopping big success for the VHF Conference and Hamarama and (4) ten outstanding new members. These achievements coupled with all of the usual dedication and participation by each member, spelled SUCCESS. Success has been the trade mark of the Mt. Airy VHF Club for over 27 years. 1983 exemplifies that tradition.

As we enter the new year (1984), let each of us take the oath of commitment to making at least one contribution to improving the activities of our club. Perhaps one can make suggestions for program topics, as an example. I am sure that it takes only a few minutes of serious concentration for each of us to come up with the idea for improvement. I am counting on ME. Won't you count on YOU?

Well, it is that time of the year again - THE BIG CONTEST. Mike, WB2RVX and his area Captains have done an outstanding job in getting things prepared. The Contest packet was better than ever. All of that good information should help each of us to strive for improvement over last year (yes, AXV; that means you too). Remember, it takes a total score for the Club to win. Each log counts as well as each contact, so let's give it the old "Pack Rat" try, and make this #24 in a row!!

SEE YOU IN THE PILE-UPS.

Bill, WA2DPU

\* \* \*

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

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8:45 PM - 220.125 MHZ  
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CALENDAR OF COMING EVENTS  
Syllabus by Lee, K3MSM

JANUARY

- 1 Well, Happy New Year - Let's Make it a good one.....
- 1 ARRL Straight Key Nite
- 7 ARRL QSO Party - CW mode
- 7 One of our great unknown Presidents born this date - Millard P. Filmore, okay you buffs - what number was he...see he is unknown.....
- 12 Board of Directors Meeting - QTH: W3NSI, Lyn Rowland, 926 Rustin St., Phila., Pa. 215-742-7695 Directors and interested club members always welcome to attend and express views.
- 14-15 THE CONTEST - ARRL January VHF SS
- 18 The Mid-Atlantic Amateur Radio Club(147.66/.06) will present a Technician/General Class License course at Cabrini College, Radnor, PA. Classes start on 18 January 84, \$5.00 registration fee and \$10.00 for texts. For further information contact WA3PZO or the College at (215) 687-2101.
- 19 General Club Meeting - "Crying Towel" or how did you do in the VHF SS. Mario's Raffle, Frankie's Silent Auction, Visitors welcome, Refreshments.
- 20 Having your ups and downs - the Roller Coaster invented this date in 1885.
- 21-22 ARRL QSO Party - Phone
- 21-22 A5 Magazine WAS SSTV Contest

DUES ARE DUE

\* \* \* \* \*

W4KFC A SILENT KEY

We sadly report that Victor C. Clark, President of the ARRL, died on Friday, November 25, 1983 from a massive heart attack after going to the hospital on Thanksgiving Day complaining of chest pains. Vic's family has requested that memorial contributions be made to the ARRL Foundation, 225 Main Street, Newington, CT. 06111

\* \* \*

ARRL BULLETIN NR 134 FROM ARRL HEADQUARTERS NEWINGTON CT DEC. 14, 1983 TO ALL RADIO AMATEURS BT: The FCC on Dec. 14, 1983, voted in the strongest possible manner to retain the Morse Code requirement for all classes of Amateur Radio Licenses. Private Radio Bureau Chief Robert Foosaner said that the Amateur Radio Service is well, thriving, and providing an excellent service to the American public. He strongly recommended that FCC maintain the code requirement, endorse the service as it is, and bury the concept of no code. Chairman Mark Fowler stated that the code is very important and in some cases essential for getting the message through. He said further that radio amateurs have contributed vitally to the country and recently were stalwart in performing communications with Grenada. The vote was unanimous to reject the concept of no code.

NEW PRODUCTS OF INTEREST TO HAMS

By Lyn, W3NSI

1. TEN TEC SATELLITE STATION: The new 2510 satellite station from Ten-Tec features a 435 MHz SSB or CW transmitter and a receiver converter for 144-146 MHz input and 28-30 MHz output. When used with a 10 meter SSB/CW receiver the #2510 will provide full duplex transmit and receive functions when operating on the OSCAR 10 Satellite in Mode B. The transmitter has 10 watts output and the converter noise figure is rated at 2.5 DB. Image rejection is better than 60 DB. Price \$420.
2. MFJ ANTENNA ISOLATORS: Two models of antenna isolators are now available from MFJ Co. The #782 allows a single feed line for a 2 meter antenna and any antenna below 30 MHz. The #780 allows use of a single feed to separate 10, 15 and 20 meter antennas. No relays or switches are used, and both units are rated for 2 KW. Price #782 \$50 #780 \$60.
3. MAST HEAD LINEAR AMP/PRE-AMP: Two new amp/pre-amps have been introduced by the Daiwa Co. Both can be mounted right up at the antenna, to cut feed line losses. The LM4036 covers 430-450 MHz and will boost a 10 watt input to 30 watts output. The built-in pre-amp has a gain of 13 Db. The #LM 2056 covers 144-148 MHz and puts out 50 watts from a 10 watt input signal. Pre-amp gain on this model is 15 Db. Both units are mounted in all weather enclosures and all switching is automatic. A control unit is used at the operating table.
4. TOWER KITS: Vargarda Radio Co. of Sweden is importing a line of Aluminum tower sections or kits that can be assembled to form tower sections. Sections are normally 10 feet long and are delivered in a 3 1/2" round cardboard tube. All hardware is SS or black chrome plated with nylock inserts. The 30' tower is rated at 5.6 Sq. ft. in 85 MPH winds. The major advantage is the construction being able to take the tower apart and transport easily to a new QTH. Weight is 24 lb per 10' section and each side is about 15" across. Cost Del. in N.Y. 3 10' sect. \$383.00.

\* \* \*

VHF/UHF REPORT

By Joe, W2EIF

The VHF/UHF Bands have shown some activity lately - some openings on 6 meters - some meteor scatter contacts on two.

The most activity was generated by the ARRL FALL SPRINTS. These short 4 hour contests were nice, however scheduling them on different nights to coincide with the so called "activity nights" may not have achieved its purpose. It might be better to select one night, say a Wed. of each contest week so people would more easily remember the event. I found that a number of people, including myself, either forgot or almost forgot about the sprints.

The 2 meter sprint was to me more active than any of the others, with contacts in all directions. The other sprints seemed to be more active to the South, West and North with relatively little to the NE. This could have been due to weather conditions, but I had the feeling that there just was less interest in the Northeast.

Hope you get all your antennas up and equipment going for the Jan. 14-15 VHF contest, and have a very enjoyable Holiday period.

SWAP SHOP

FOR SALE: R-390 general coverage rcvr w/manuals. Excellent condition.

CONTACT: Sandy Kernosh  
Phone: 215-732-4521 - evenings

FOR SALE: Icom 2 mtr FM only xcvr (IC-255A) w/reg. mike and HM-8 tone encoder mike; 1/25 watt output; manuals, mint condx. Make offer, must sell soon - very reasonable.

CONTACT: Bob Wilderman, K3SRO  
19 Glen Rd., Lansdale, Pa. 19446  
Phone: 215-822-7474

FOR SALE: 50, 220, 432 MHz transverters; 432 MHz 4CX250B linear; 30 in. rack cabinet, Eldico HF tuner; Tek. 545 scope; 60-250 W. SS HF amp. send offers and get info.

CONTACT: Steve Harrison, KOØU/3  
5404 85th Avenue  
New Carrollton, MD. 20784  
Phone: 301-459-5941

FOR SALE: Electro-voice model 729SR mike w/stand \$20; Realistic CB xcvr TRC 455 w/manual \$25; Hewlet-Packard pulse generator #122A \$25; 220 xmtr P.S. & modulator w/R48 rcvr, 3 rack panels w/ variac meter & control switches \$25; Heath Vector scope w/manual \$60; Heath model EE 101 Educational kit w/all parts, Vector boards, power supply \$25; Complete 6M, AM xmtr, 829F, relay controlled VFO & P.S. mod. \$25; Complete 2M AM xmtr 5894F, mounted on 4 ft. rack on wheels, VFO, P.S. mod. \$25; Heath audio analyzer w/manual, needs meter \$10; Domino clock A.C. operated \$10; Some stereos and speakers. 19" RCA XL color no green works good \$50; 10" GE color no red \$35.

CONTACT: Doc Cutler, K3GAS  
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8x12x3 6.90	3.55	*10x17x3 3/4 11.95	3.75
8x12x4 8.50	3.55	10x17x4 12.95	3.75
10x14x3 8.40	3.65	*10x17x5 18.45	3.75
6x17x3 8.25	3.60	*8x18x3 8.95	3.75
8x17x3 8.40	3.65	*8x18x4 11.50	3.75

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TID BITS

Sunwatcher, Jack Power, W2AXU reports the monthly Sunspot No. for November, 1983 = 33.2 Smoothed No. for May 1983 = 77.1.

Dave, WB2VLA and Nancy, N2AII are the proud parents of twins - a boy and a girl, Garrott and Heather. These twins will keep them busy this holiday season - best wishes from the Cheese-Bits staff.

K3LYB, Abel finally did it - got his general class ticket. Good luck OM.

Wonder what Gordon, K3VYG did with that \$194,000.00 check from the local bank!

We will be announcing a Horace Deacon (W3AJF) open house sometime early in 1984 - Be ready to scrounge through some goodies!

\* \* \*

VOTED TO MEMBERSHIP - MEETING  
DEC. 15, 1983

AC3T, Len Moncaleri XYL - Ruth  
2657 Abington Road  
Wilmington, DE 19810  
302-475-9402

VOTED TO RETIRED STATUS - MEETING  
DEC. 15, 1983

K3HW, Howard Weinstein

APPLICATION FOR MEMBERSHIP

K3VIT, Thomas J. Jenkins  
8 Wyndmoor Drive  
Phila., Pa. 19118  
215-836-4991

PACK-RAT CHECK-OFF LIST ADDITIONS

K3GYS, Gus - 2, 220, 432  
Add 1296 to W3KKN

\* \* \*

ANOTHER K3MXM OFFERING

WHAT'S A PPM: PPM is the abbreviation for Parts Per Million, a convenient means of expressing very low concentrations of a substance in a mixture, or as a low level contamination in a pure product. For comparison purposes, the following various measures are equivalents to "1PPM": An ounce of salt in 62,500 pounds...An ounce of dye in 7,530 gallons of water... An ounce of sand in 3 tons of concrete...An inch in 16 miles...A cent in \$10,000.00.... A pound in 500 tons...A minute in 1.9 years...

Less accurately, for those who favor a very dry martini: A drop of vermouth in a tank car of gin.....

Reprinted from QRM-Tusco ARC...tnx...

FROM "RAGS REVIEW"  
More From The Old Timer

There is a ominous movement growing in our world! It is proliferating at an ever-accelerating tempo! It cannot be stopped! What is it, you ask? It is the incorporation of the ubiquitous microprocessor chip into every electrical, electronic and eletromechanical gadget known to the average household. This incorporation converts an ordinary gadget into a "smart" gadget. Adding a microprocessor can transform an ordinary microwave oven into a "smart" microwave oven; and so on----and nauseum.

Certainly you must respond, "But, 'smart' devices do move things faster and better and sometimes even cheaper. How can that be ominous, and who wants to stop it?"

Well, here's the problem. These little microprocessor buggers (and associated circuitry) are very sensitive to RF if improperly used and inadequately shielded. RF is what radio transmitters emit. The explosive growth of the radio communications industry is well recognized. Cordless telephones and mobile cellular radio are two examples. Many others exist. Pretty soon, everyone will be living in a much more crowded RF sea. And so will all those microprocessors which make so many gadgets "smart"!

The evidence predicting a growing and perhaps catastrophic collision between RF and microprocessors is beginning to show up.

The explosive adoption of home computers by hams for all sorts of applications has led to experiencing many incompatibilities---like RF blitzing the microcomputer---like micro-computer interfering with sensitive receivers, etc. Which do you give up---ham radio or computers??

But here is the big one! In CQ Magazine November 1983. Qhote: "In response to an amateur's complaints on the "runability" of his 1982 Toyota Cressida, Mr. Stephen Oakley, manager, Customer Relations, Gulf States Toyota, Inc., Houston, Tx. Noted:

'We are certainly sorry to hear of the problems you are encountering with the runability of your Cressida, but feel the problem could possibly be directly related to your Ham radio unit. As you know, Toyota has a precautionary suggestion in the owner's manual regarding the use of two-way (radio) equipment.'

They feel that since there could be the possibility of high output from the transmitter it could cause a malfunction of the vehicle's computers. If this happens, Toyota will assume no liability for the replacement of such components."

A similar problem for 1982 Subarus was also noted.

In QST November 1983, Qhote: "Sam A. Gilliam, KC5XO, of Shreveport, Louisiana, decided to make a sizeable investment in Toyota's top-of-the-line Cressida, with the idea that he could use his newly acquired automobile in conjunction with his 2 - meter rig. According to Sam, the car began running rough, stalling and refusing the start. The dealer told Sam that he had damaged the "brain box" by using his two-way radio."

They refused liability and did not cover replacement of the "brain box" quoted at \$400.00.

Inadequate design and fabrication of "hi tech" items has hurt ham radio before. How many hams do you know that operate 6 meters during prime-time TV? Aren't you glad you don't have a "smart" Toyota?

NEW WARC-79 EMISSION DESIGNATORS

From W5YI Report

The World Administrative Radio Conference of 1979 provided for new emission designators. It is expected that these new classifications will eventually find their way into part 97. Here is an advance look at some of them:

<u>Old Type</u>	<u>Emission Designator</u>	<u>New Type</u>
A0	Unmodulated pure carrier	NON
A1	Morse telegraphy	A1A
A1	Teletype Telegraphy	A1B
A2	Morse Sound Modulated	A2A
A2	Teletype Sound Modulated	A2B
A3	AM Telephony, Double Sideband	A3E
A3J	Telephony, Single Sideband	J3E
A4	AM Facsimile	A3C
A4J	Facsimile, Single Sideband	J3C
A5	AM Television, Double Sideband	A3F
A5J	Television, Single Sideband	J3F
F0	Unmodulated Pure Carrier	NON
F1	Morse Telegraphy	F1A
F1	Teletype Telegraphy	F1B
F2	Morse Sound Modulated	F2A
F2	Teletype Sound Modulated	F2B
F3	Frequency Modulated Telephony	F3E
F4	Frequency Modulated Facsimile	F3C
F5	Frequency Modulated Television	F3F
P	Pulse Emission Without Modulation (for example, Radar)	P0N

There are others, but the above new emission designators are the ones that we are most concerned with in the Amateur Radio Service.

Here's an explanation of the new symbology

First Character:

- N = Emission of an unmodulated carrier
- A = AM, double sideband
- J = SSB, suppressed carrier
- F = Frequency modulation
- P = Sequence of unmodulated pulses
- C = Vestigial sidebands

Second Character:

- 0 = No modulating signal
- 1 = A single channel containing digital information, without the use of a modulating subcarrier
- 2 = A single channel containing digital information, with the use of a modulating subcarrier
- 3 = Single channel with analog information

Third Character:

- N = No information transmitted
- A = Telegraphy (aural reception)
- B = Telegraphy (automatic reception)
- C = Facsimile
- D = Data Transmission, telemetry, tele-command
- E = Telephony
- F = Television



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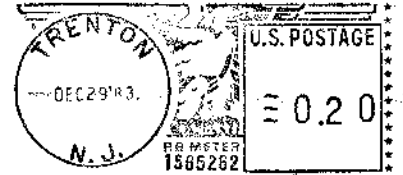
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