

PACK RATS'



PACK RATS

CLUB CALL: W3CCX

MT. AIRY VHF RADIO CLUB, INC.

# CHEESE BITS



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

ARNS

50.125, 144.50, 432.110, 1296.025 Mhz, WR3ACD - 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

VOLUME XXII

NOVEMBER, 1980

NUMBER 11

## THE PREZ SEZ

It's history now, but until next year, the 1980 versions of Hamarama and the Mid-Atlantic VHF Conference were the biggest and best yet. The good weather really drew out the crowd with both buyers and sellers happy with the results of their deals. The conference brought out the faces that go along with the voices and calls that we usually only hear from the other end. It was good to see everyone there and to hear from the experts on how to do it. Thanks to everyone - attendees and speakers who freely came to share their ideas and knowledge with everyone. The X band SSB transverter of K1GT was really interesting and looked as easy to build as a 2 meter transverter. I'd like to thank Ron, WA3AXV and Dave, W3ZD for their leadership and organization in making everything look so smooth and easy and thanks to the rest of you for all of the legwork. It takes a lot of individuals to get all of those details to work out right. It couldn't have come out much better because everyone worked - you get out of it what you put in.

The next big event on the Packrat calendar is the January Contest. Bill, WA2DPU, had to drop out from being the 1981 Contest Chairman due to a big increase in his workload, so Steve, WA3WAS stepped in to fill this job. (Bill volunteered for next year). Steve will be in touch with you soon so don't be surprised when he wants to know how you're set up. The weather is great for antenna parties, so keep your 220 box turned on and respond to those requests for help - there's still time to add another band this year too - 432 and 1296 are waiting for you (and me).

For the non-Packrats in the area reading this, please note that the Packrats are always looking for a few good Rats. Ask your Packrat buddy on how to become one of us, check into the nets, come to the meetings and most of all be prepared to do some work and have some fun.

Thanks to fellow rat, Jerry, K3KVS for his program at the October meeting on Semiconductor Processing. Jerry's business is making the machines that make the transistors that we use in our rigs to make contacts - thanks Jerry.

73, Harry

\* \* \*

## VISITORS AT THE SEPTEMBER 18, 1980 MEETING

WB2RVX, Mike  
WB3JYO, Paul

Pennsauken, New Jersey  
Wycombe, Pennsylvania

John Sorter, Newtown, Pennsylvania

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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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

AWARDS CHAIRMAN:

W2EIF, JOSEPH KILGORE  
609-783-9478

CLUB HISTORIAN:

W3CL, HARRY B. STEIN

MONDAY NIGHT NETS      NET CONTROL

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

PACK RAT REPEATER 222.98/224.58 MHZ  
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COR. SECY: WA3WAS, STEVE SIMON  
REC. SECY: K3IGX, DICK BOYLE  
TREASURER: K3GAS, DOC CUTLER  
DIRECTORS:

W3HQT, BILL OLSON (Ex-Of)  
WA2DPU, BILL SMITH (2yrs)  
K3NHX, JOE GARDOCKI (2yrs)  
N3AHI, JIM HOLT (1yr)  
WA3NFV, DAN MITTEN (1yr)

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W3HMU              WB3KES  
HARRY AND ROSE      DAN AND LUCY  
W3IIT                  WA3NFV

CALENDAR OF COMING EVENTS  
Syllabus by Lee, K3MXM

NOVEMBER

- 1-2 National QCWA Convention, Orlando, Florida
- 1-2 ARRL - Sweepstakes, Info: October QST - Page 75
- 4 Election Day, Don't let the other guy win because you didn't vote. Support your candidate with your vote.
- 7-8-9 1980 ARRL Hudson Division Convention - Pines Hotel, South Fallsburg, N.Y.
- 7 "Galloping Gertie" Bridge Collapses - Tacoma, Washington 1940. Remember that famous foto.
- 8-9 For you RTTY buffs - European DX Contest
- 9 RF Hill ARC - Winterfest, Armory, Sellersville, Pa. One of the last Hamfests in our area this year. About an hour out of Phila. A nice indoor Hamfest and worth your attendance.
- 11-15 Business and personal computer Xpo - Phila. Civic Center. Discount tickets available at local Radio Shack Stores.
- 11 Veteran's Day - a salute to all servicemen and past conflicts.
- 12 WIAW - Qualifying Run, CW, 10-35 wpm. A good chance to test yourself..
- 13 Board of Directors Meeting - QTH, K3NHX, Joe Gardocki, 72 Meadow Lane, Doylestown, Pa. Phone: 215-348-3504. Directors and interested parties always invited to attend and state your views.
- 14 Historical Fact for our investing friends, The Dow Jones average went over 1000 for the first time in 1972 - What is it today???
- 15-16 ARRL November Sweepstakes - PHONE - See QST October, Page 75
- 18 Mickey Mouse born 1928
- 19 Lincoln delivered the Gettysburg Address, 1863
- 20 General Club Meeting - Southampton Free Library, Street Road, Southampton, Pa. 8:00 P.M. Program to be announced on the Monday night nets. The Mario Raffle, Frankie's Silent Auction, Refreshments. An open meeting for one and all. Bring your VHF Friends. Sign in for Holiday Greetings on the Big Card for December Cheese-Bits.
- 22 Beaver Moon - The farmers signal that the growing season is at an end.
- 22 John F. Kennedy Assassinated 1963.
- 27 THANKSGIVING DAY. Thank you - thank you for all blessings received
- 29-30 CQ World Wide DX Contest CW

NEW PRODUCTS OF INTEREST TO HAMS

By Lyn, W3NSI

1. 2300 MHZ DOWN CONVERTER: Universal Communications is advertising in 73 (pg. 129 Aug.) a very interesting little converter unit for the 2300 ham band. This is also the range of frequencies used for HBO movies, but this is not mentioned in the ad. The converter includes an RF stage, mixer, local osc. and IF amplifier mounted on a small PC board which is mounted on the back of a coffee can antenna. Price \$35. 1825 Jocyle, Arlington, TEX. 76010
2. LOW OHM METER ADAPTOR: The RX-2 made by the Alpha Components Corp. can be used to measure resistance down to .001 ohm. It is designed to be connected to a voltmeter, either digital or analog type. Two ranges are used, 10 times or 100 times the volts reading on the meter. The RX-2 could be used to check the many low value resistors used in transistor circuits, or for testing grounds and low voltage transformer windings. Price \$49.50 - 115 Eucalyptux Drive, P.O. Box 306, El Segundo, Cal. 90245.
3. DOWNCONVERTER #2 (2300 MHZ): This frequency is really jumping. Semiconductor Surplus Co. is advertising a 2300 converter in various stages of assembly. Plans alone are \$10. PC board and plans \$20., complete kit \$80. and finally assembled and tested \$115. 2822 N. 32nd Street, Phoenix, Arizona 85018.

\* \* \*

VHF/UHF REPORT

By Joe, W2EIF

Not much to report as of this date (Oct. 16, 1980). There has been no F2 activity on six meters for the East Coast that I know of. According to our Sun Spot expert, W2AXU, the current Sunspot cycle peaked around Nov./Dec. 1979, and is now on the decline. He has advised us not to expect too much this Fall on 6 meters. Oh well, all you have to do is wait around another 11 years!!

The activity on the bands has been low although there are always contacts to be made on 2 meters during the evening. Activity should begin to pick up as soon as daylight saving time is over, which will allow more operating time with people spending more time indoors during the evening hours.

Last minute 6 meter DX info de W2AXU:

Note: The January 1981 VHF SS dates are January 17 and 18, 1981. Mark your calendar accordingly. October 16, 1980 - W2IDZ and W2UTH worked ZD8TC on Ascension Island, S.A. October 19, 1980, at 1600 UTC - WB1AVX worked EL2AV in Liberia.

\* \* \*

PACK RAT TEE SHIRTS AVAILABLE

Due to increasing demands, we will place another order for T-shirts with the Pack-Rat Logo. Shirts will be orange with black logo and iron on letters. Childrens sizes are available and names may be used instead of call letters. Shirts have been known to shrink one size when washed.

To order, please send check for \$4.75 for each shirt to K3JJZ, 8533 Algon Avenue, Phila., Pa. 19152.

Specify size and call letter or name to be used.

El, K3JJZ

\* \* \*

WB2UVB, Gene advises that baseball hats with the Pack-Rat logo and your call letters will be available at the November 20, 1980 meeting - Bring \$5.75.

\* \* \*

VISITORS AT THE OCTOBER 16, 1980 MEETING

WB3JYO, Paul, Wycombe, Pa.  
WB2RVX, Mike, Pennsauken, N.J.  
WB2UVB/WA7UJW, Gene, Moorestown, N.J.  
KA2CQX, Janice, Moorestown, N.J.

WA2RCB, George P. Cherry Hill, N.J.  
WB3LNZ, Red Thompson, Fairless Hills, Pa.  
WB2GEZ, Marty Hackett, Crosswicks, N.J.  
WB2TFH/N2CG, George, Saddlebrook, N.J.

SWAP SHOP

FOR SALE: Interceptor B rcvr with all-bander converter - \$100. Plate xformer 3680/1840 volts plus two 8 Henry chokes (xformer & chokes commercial grade) \$100. 450 Mhz repeater complete- (Call for info) RCA 50 Mhz LD mobile - make offer. 450 Mhz Motorola Micor - 12 channel mobile \$500.

CONTACT: Dave, K3BPK  
Phone: 215-688-5790

FOR SALE: 1296 Mhz Varactor tripler MWV 1296 brand new, unused \$75.

CONTACT: Joe, K3NHX  
Phone: 215-348-3504

WANTED: Gonset 6-2-1 1/4 VFO with NBFM provision for use with G-76

CONTACT: WA3FLE  
Phone: 215-825-2850

FOR SALE: Heath HW101 with CW filter & pwr. supply, Manual, clean condition, \$275.

CONTACT: Max, W3JZ  
Phone: 215-886-1695

FOR SALE: 6 mtr Supreme SSB rigs - no pwr supplies. 3 with VFO's - 5 less VFO's. Spare parts also.

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

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CONTACT: Don, WB3CDE  
Phone: 215-847-5065

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Please send your check or money order before November 15, 1980. No COD orders accepted. The 1981 Callbooks will be ready for shipment on or about December 1, 1980. If you are in the Northern N.J. (Bergen County) area, you can save UPS & handling charges by picking-up your order at WB2TFH's QTH. Call George WB2TFH (201) 843-5130 for info. Send your order to: CRAFT ELECTRONICS, P.O. Box 473, 18 Miller Street, Saddle Brook, N.J. 07662.

\* Shipping & handling charges within W1, W2 & W3area.

\* \* \*

APPLICATION FOR MEMBERSHIP

WB2RVX - Dr. Michael F. Gullo  
3813 Delaware Avenue  
Pennsauken, N.J. 08109  
609-663-2725

WB3JY0, Paul Drexler(Student Grade)  
P.O. Box 73  
Wycombe, Pa. 18980  
215-598-3934

WB2TFH/N2CG - George E. Hall  
18 Miller Street  
Saddle Brook, N.J. 07662  
201-843-5130

\* \* \*

ARRL BULLETIN NR 100 FROM ARRL HEADQUARTERS NEWINGTON CT SEPTEMBER 30, 1980 TO ALL RADIO AMATEURS BT: To encourage more repeater groups to submit information for the Repeater Log in QST, form CD258 has been created by the ARRL Communications Department. This streamlined card can be used to report significant emergency and public safety activities provided via repeaters, for ultimate recognition in the Public Service column in QST. Enclose an S.A.S.E. with your request for a supply of CD258. AR.

1980 Mid-Atlantic States VHF Conference

By Dave Zimmerman, W3ZD

The fourth annual VHF conference sponsored by the Packrats was held October 4 at the Warrington Motor Lodge. Attendees felt that it was an outstanding success with 136 participants.

Technical talks by Paul Wade, WA2ZZF, Bob Atkins, KA1GT, Dick Knadle, K2RIW, Bill Olson, W3HQT, and Ron Whitsetl, WA3AXV were all excellent, to the point, and well received by those who attended. The program was led by an interesting talk on FM repeaters by Larry Will, K3ADS, the former area repeater coordinator. The program was complimented nicely by Bill Tynan, W3XO, VHF Editor, QST, who spoke on the status of AMSAT and showed some interesting slides.

A quick analysis of the list of those who registered is as follows:

Club Members 28 Md. and Del. 9 New Jersey 27 Pa. 37  
New York 9 New England 11 Ohio 3 Virginia 2 Canada 1

Of the club members, the following appear on the list:

N3AHI, WA2DPU, W3IIT, WA3NFV, K3VYG, W2AXU, W2EIF, K3IUV, K3NHX, WA3WAS, WA3AXV, K3GAS, K3JJZ, W3NSI, W3YXF, K3BPP, W3HMU, WA3JUF, WA3NUF, W3ZD, W3CL, W3HQT, W3KKN, K3PHY, W3CXU, K3IGX, K3MXM, WB2SZK.

It would appear that the list of members would be a bit lighter than other years, but the overall attendance was up by the 10% that the event has shown for each of the last three years.

The club is very thankful to those who attended, and especially to those who took part in the program as speakers and who helped with the many small details that go to make up a conference. Doc, K3GAS, held down the registration desk in fine style.

The Symposium part of the event was followed by a cocktail party in the Packrat Hospitality Suite and a very tasty buffet dinner ala Warrington. A special vote of thanks to the refreshment steward, Lee Cohen, K3MXM, who with the assistance of a helper, K3PHY, served as bartender both at the cocktail party and at the Friday evening get-together in the Club Suite.

\* \* \*

Thanks to HR report Number 323 - October 10, 1980 for the following:

The Mid-Atlantic VHF Conference and Hamarama October 4th and 5th in Warrington, Pennsylvania, was a big success, with 136 VHF buffs at the conference and 2,100 flea market browsers crowding the Hamarama. Many interesting technical discussions were held, and the Mt. Airy VHF Radio Club (Pack Rats) did a great job putting the show together.

\* \* \*

Here is a list of the repeaters on the 220-225 MHz band that can be reached from our area. This list is from Ed Loveland, WA2PFC who has worked them. Listed are the output frequencies; the input is 1.600 MHz lower.

223.940	Parksburg	224.580	Packrats Churchville, Pa.
224.000	A&A Communications, Wilm., Del.	224.620	Tri-State RG
224.020	Fancy Hill	224.640	Blue Bell, Pa.
224.060	CCRG Mt. Airy	224.660	Gloucester County ARC, Barnsboro, NJ
224.100	SARC WCAU Phila.	224.700	Blue Mountain, Pa.
224.180	CCRG Phila	* 224.720	Toms River, N.J.
224.280	Jenkintown	224.740	Phila.
224.300	Lancaster	224.760	KYW Radio, WA3EVT/rpt.
224.340	WARA Warrington	224.780	Vineland
224.460	Phila.	224.900	Lancaster
224.500	DCARA Upper Darby, Pa.	224.940	P.A.R.A. Valley Forge
224.540	Wilmington	224.960	Newark, Del.
		224.980	Newtown Square

FROM THE HETERODYNE

\* Info supplied by WA2DKB

FIFTH QUARK FOUND: Experiments at CESR, the Cornell Electron Storage Ring, have firmly established the existence and identity of the fifth quark, scientists reported at the 20th International Conference on High Energy Physics, held in July at the University of Wisconsin in Madison.

Considered the basic building blocks of matter, the tiny sub-atomic particles called quarks come in six varieties or "flavors", theorists believe. Researchers are calling the latest particle to be discovered the "bottom" or "beauty" quark, and the hunt continues for the sixth particle, the "top" or "truth" quark.

The CESR discovery resulted from a collaboration of physicists from Vanderbilt University, Syracuse University, Rutgers University, the University of Rochester, Harvard University and Cornell. CESR is a national facility and is supported by the National Science Foundation. CORNELL REPORTS DE K3DLS, SEPTEMBER 1980.

\* \* \*

SUNSPOT HOTLINE may be called to get up to the minute recorded information about sunspots, solar flares, geomagnetic storms by dialing 301-344-8129. Operated at Goddard Spaceflight Center, Greenbelt, Md. Data from Solar Max Mission Spacecraft. De - WB2SZK.

\* \* \*

A GOOD ITEM FROM W5YI REPORT

SPACE RFI COMING? About the year 2000, some of our energy needs will be piped down from space. SPS (For Satellite Power System) is an ambitious joint venture between NASA and the Department of Energy that will collect solar energy in space and feed it down to earth via microwaves operating on 2.45 GHZ. The solar collection panel will measure a gigantic 4 by 6 miles - so big that assembly of the power satellite will have to take place in space. A space shuttle will deliver the parts from supply depots in geosynchronous orbit! DC power collected from the sun will be transmitted to earth by a round antenna more than half a mile in diameter.

\* \* \*

TID BITS

The HAMARAMA registration Chairman thanks the following gals for an outstanding job at the registration tent on October 5, 1980 - Rose Brown, Della Bynum, Peggy Cohen, Loretta Cutler, Anne Gardocki (K3NHW), Bert Kenas (W3TNP), Lucy Mitten, Florence Power (WA2WYE), Wendy Simpson, Jan Souza, Sylvia Stein and Lynne Whitsel. George McMahon, WB3IND ably assisted at the prize table with Gordon, K3VYG picking out the winners from the ticket drum. W2AXU, Jack made announcements on the FB Philmont Mobile Radio Club public address system. Carl Youngs, W3NWS won the raffle prize.

Jack Power reports the Zurich Sunspot number for September 1980 was 154.5.

George Hall, WB2TFH advises that the N2CG Beacon is operative from N. Jersey on 50.070 Mhz. This low power signal blasts into the Delaware Valley.

Congratulations to Mario Deluca, W3ELX on his upcoming marriage.

Best wishes to Dick Huntzinger, W3FQD on his recent retirement from the Naval Air Development Center.

WA3WAS, Steve Simon appointed January VHF SS Chairman, Vice Bill, WA2DPU who resigned due to other important commitments.

Photos in this issue thanks to Dick Boyle, K3IGX.

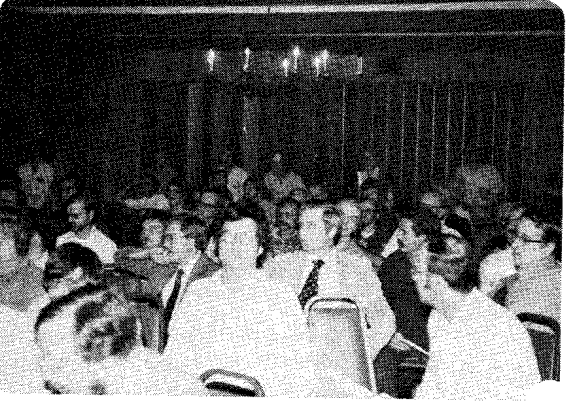
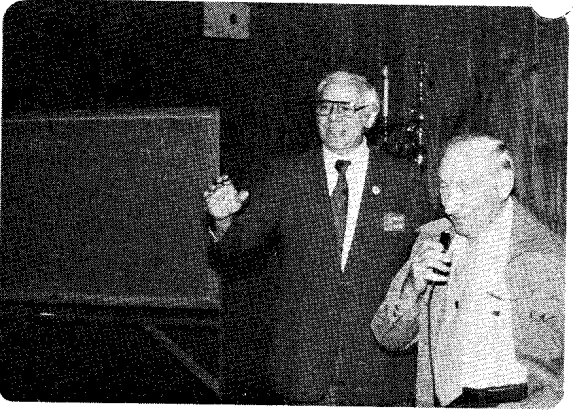
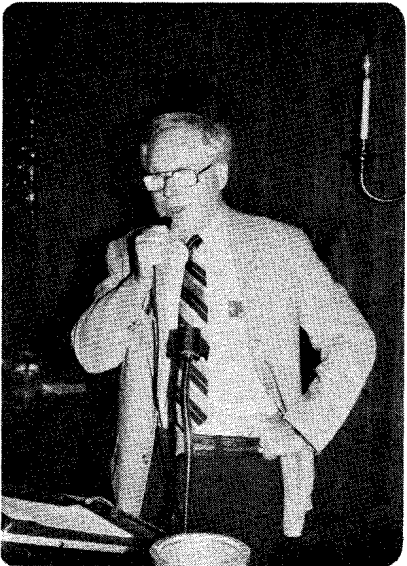
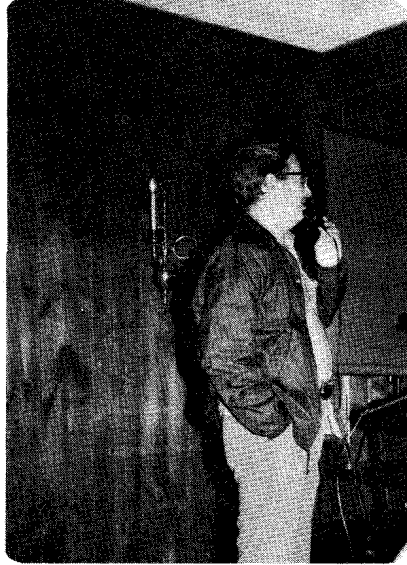
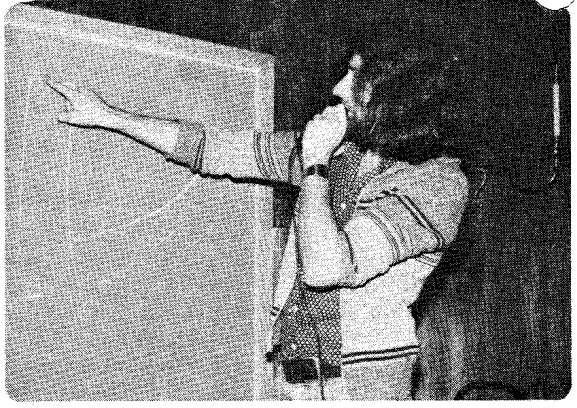
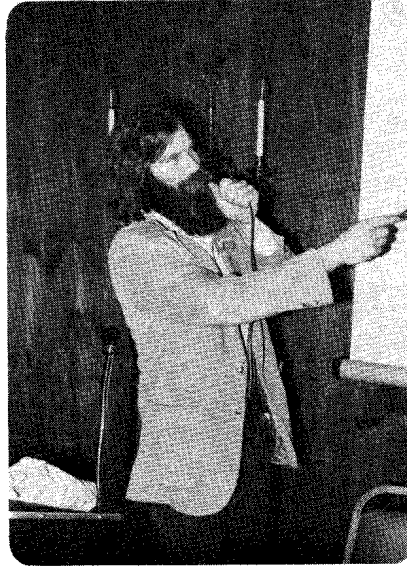
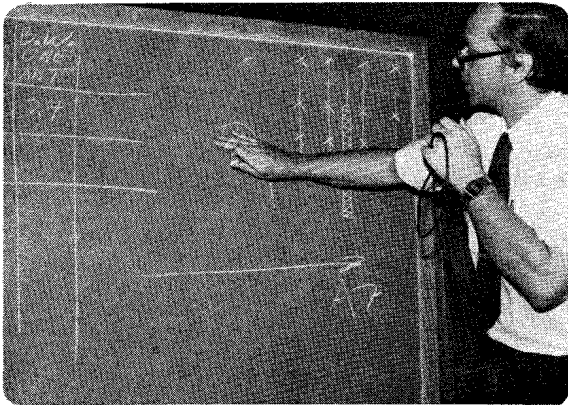
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SPACE FILLERS

Once you had to buy an apple to help the unemployed - now you have to buy an automobile....

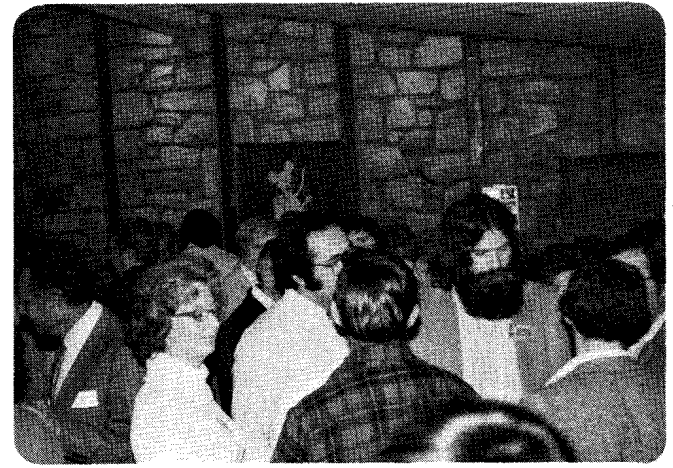
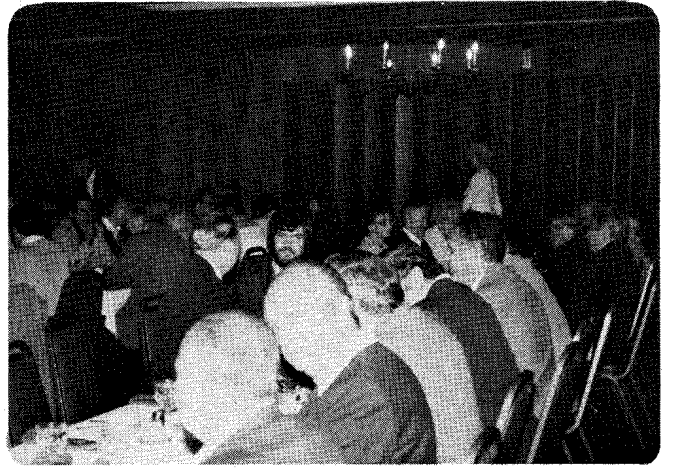
In winter the temperature of 55 is warm - in summer it is downright cool....

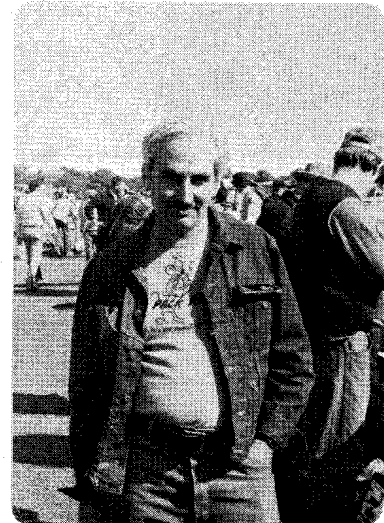
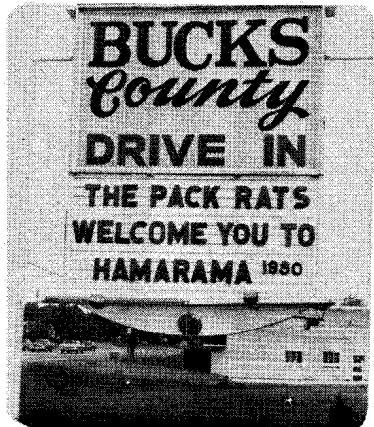
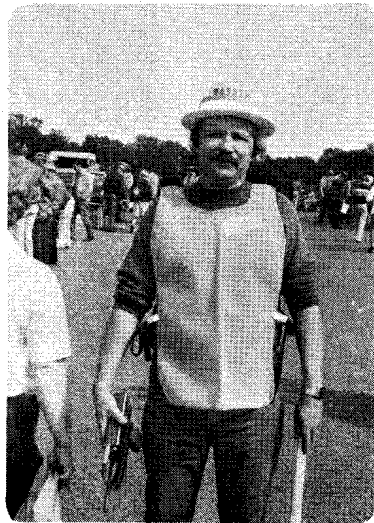
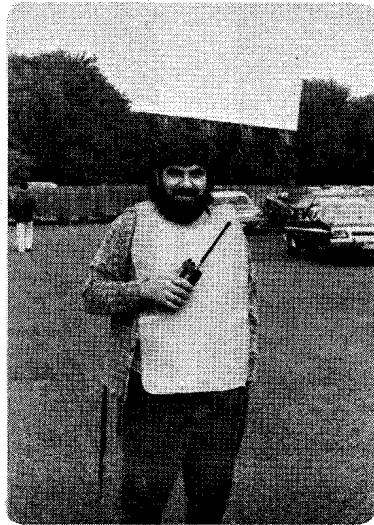
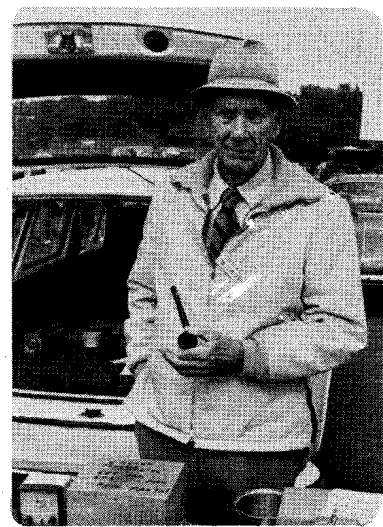
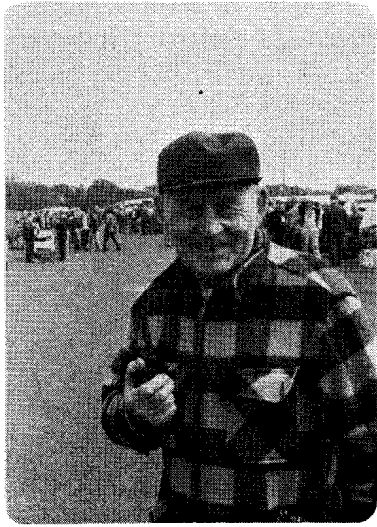
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