

PACK RATS'



PACK RATS

CLUB CALL: W3CCX

MT. AIRY VHF RADIO CLUB, INC.

CHEESE BITS



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

VOLUME XXVI

FEBRUARY, 1986

NUMBER 2

THE PREZ SEZ

Well, the 1986 January VHF Sweepstakes is history. I'd like to thank Dave, N3CX for his enthusiasm as Contest Chairman. In addition, everyone should be congratulated for the excellent turn out as the Rats could be heard from 50 Mhz to 10 Ghz. Conditions were good and we were even treated to an early Sunday evening "E" skip opening.

The January meeting brought many interesting sagas from the members. Congratulations to Pat, WB3DNI for winning this years Crying Towel. If anything, we've learned from this meeting that losing your frequency during a Contest is a criminal offense.

February meeting brings one of the most interesting meetings of the year as it is the annual "Home Brew Nite". This meeting shows that VHFers are not just appliance operators. So, dust off your latest creation and tell us how well it does or doesn't work. As usual, everyone is welcome, so bring a friend.

73, Mike, WB2RVX

* * *

A NOTE FROM N3AHI - JIM HOLT

The 4-Landers VHF/UHF Group too has installed a 100 watt, 220 Mhz repeater at its Contest Site on 4774 ASL Mount Toxaway in North Carolina (Grid square EM-85). Input/output frequencies are 223.12 - 224.72. Call sign is K4MSK/RPT. It is hoped that in addition to serving the needs of area VHF DX-ers, the signal will be of value in spotting long haul path openings to other areas.

* * *

IN MEMORIUM

Victor Lees, W3NKD, a charter member of the Club, became a Silent Key in Jan. 1986.
 Sophia Harrison, the widow of Ken Harrison, W3CPT, passed away in Dec. 1985.
 Edith Grace, the wife of Hal Grace, W3HFY, passed away on Jan. 23, 1986.

OUR CONDOLENCES TO THE FAMILIES

Pack Rats XHEESE BITS is a publication of THE MT. AIRY VHF RADIO CLUB, INC. Philadelphia, Pa. and is published monthly.

SUBSCRIPTION RATE - \$3.00 PER YEAR

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.

EDITOR:

W3CL, HARRY B. STEIN
2087 Parkdale Avenue
Glenside, Pa. 19038
215-887-5052

PUBLISHER/SUBSCRIPTION MANAGER:

K3GAS, DOC CUTLER
7815 New Second Street
Elkins Park, Pa. 19117
215-635-1078

PRINTER:

WB2VLA, DAVID POWER
609-882-1040

TYPIST:

WA3TEM, MARSHA LISSAUER

TRUSTEE OF THE CLUB CALL - W3CCX:

WA3AXV, RONALD WHITSEL
215-355-5730

AWARDS CHAIRMAN:

W2EIF, JOSEPH KILGORE
609-783-9478

CLUB HISTORIAN:

W3CL, HARRY B. STEIN

MONDAY NIGHT NETS

7:30 PM - 50.125 MHZ
3:00 PM - 144.150 MHZ
3:30 PM - 222.98/224.58 MHZ
3:45 PM - 220.125 MHZ
4:00 PM - 432.110 MHZ
4:30 PM - 1296.1 MHZ


NET CONTROL

W3CL
W2EIF
K3GAS
KS2T
K3IUV/K1PXE
- - -

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

OFFICERS: 1985-1986

PRESIDENT: WB2RVX, MIKE GULLO
VICE-PRES: WA2OMY, GARY HITCHNER
COR.SECY : W3CXU, JOHN ALLEN
REC.SECY : W3NSI, LYN ROWLAND
TREASURER: K3GAS, DOC CUTLER
DIRECTORS: WB2VLA, DAVE POWER (EX-OF)
N3CX, DAVE HACKFORD (2 Yrs)
WA3JUF, DAVE MASCARO (2 Yrs)
WA3AAJ, JIM WARD (1 Yr)
WB3IND, GEORGE McMAHON (1 Yr)




THE AMERICAN RADIO RELAY LEAGUE **QST**

HUGH A. TURNBULL, W3ABC
Director, Atlantic Division


8903 RHODE ISLAND AVE.
COLLEGE PARK, MD. 20740 (301) 927-1797

1-802-478-2757

AMATEUR
and
ADVANCED
COMMUNICATIONS



G. B. WALLS 3208 CONCORD PIKE (RT. 202)
WILMINGTON, DEL. 19808




Pennsylvania Institute
of Technology

PAUL D. MERCADO
Chairperson, Drafting Design Department

Rose Valley, Notre Dame Campus
(215) 565-7900 800 Manchester Ave., Media, Pa. 19063-4098

FOR SERVICE CALL
(215) 672-3950
(215) 622-1800



MICHAEL McMACKIN
REGISTERED PLUMBING & HEATING
BATHROOM INSTALLATIONS • ELECTRIC DRAIN CLEANING

1307 HILTON DRIVE 2405 PARKSIDE AVE.
LINE LYNDEN, PA 19036 CATBORO, PA 19040

CALENDAR OF COMING EVENTS

Syllabus by Lee, K3MXM

FEBRUARY

- 1 Need something to add to your wish list - visit the Philadelphia Boat Show at the Civic Center.
- 2 Ground Hog Day - you already know the story about the shadow. We won't repeat it but....we sure hope that....
- 8 Chinese New Year - The Year Of The Tiger
- 8-9 For our southern readers - Miami, Florida Hamfest
- 12 Ash Wednesday
- 12 Lincoln's Birthday
- 13 Board of Directors Meeting - QTH: W3NSI, Lynn Rowland, 926 Tustin Avenue, Phila., Pa. If lost: 742-7695. Directors and interested club members always welcome.
- 14 St. Valentine's Day - better not forget the other half... A few kind words and some goodies solve many a problem.
- 15-16 ARRL International DX Contest - CW. See Dec. QST Page 93
- 17 Washington's Birthday (Observed)
- 20 General Club Meeting - Southampton Free Library, 8 P.M. Topic: Home Brew Nite: There will be five categories with a first and second place prize being awarded for each category: (a) Most Technically Oriented (b) Most Practical/ Useful (c) Most Complex (d) Largest Kluge (e) Most Worthless. This is the time and place to show off those new projects that have been abrewing all year long. Show them with pride to your peers. The Mario Raffle, Frankie's Silent Auction, Free Refreshments.
- 22 Maple Sugar Family Day. Annual tapping of the trees and other family activities at Taylor Arboretum. Something good to see...
- 22 If you missed the big parade or didn't want to stand outdoors - here is your chance to see the Mummers in person at the Civic Center.
- 23 Vienna Virginia Winter Hamfest
- 23 Lancaster Hamfest - First one in the local area. Guernsey Bay Barn, Route 30, This side of Lancaster. Usually a very nice hamfest and the seasons' opener.
- 25 Just to make your month - Federal Income Tax established in 1913, and it is about 45 days till yours is due!!

Halley's Comet is getting closer - have you seen it yet???

DUES ARE DUE

DUES ARE DUE

DUES ARE DUE

Mark your calender - LADIES NITE MAY 31st!!!!!!!

NEW PRODUCTS OF INTEREST TO HAMS

By Lyn, W3NSI

1. REGENCY HX 1200 SCANNER: The new HX 1200 is the same size and looks the same as the HX 1000 that it replaces. There are a number of changes in the new unit. It now has 45 mem. channels instead of 30, and, any of these channels are available on direct access. It is not necessary to go through the whole series to get back to the one you want. AM is now available in a new frequency range covering the aircraft band at 118-136 Mhz. Scan rate is either 6 or 12 channels per second, by push button selection on the front panel. Freq. range is as follows: 30-50 Mhz (act. cov. 25.6 - 60), 118-176 Mhz, 406 - 512 Mhz (act. cov. 405 - 520). For ham use, the HX 1200 covers the FM 10 meter band and 6 meters FM, 2 meter FM, and 440 FM. Unit comes with case, rubber duck ant. nicad battery pack and charger, and earphone. Price List \$370 Avail. \$215 (see page 174 Jan. QST.)

2. NCG CO. HAM ANTENNAS: Two trap vertical antennas are now available from NCG. The first is the HF-3 WK which covers the new WARC bands only at 10, 18 and 24 Mhz. It is about 15 feet high and rated at 1 KW at 50 ohms imp. SWR is rated at 1.5 max over the bands, not a big problem considering the width of these WARC frequencies. The second antenna is the HS 670 (as in Kenwood TS 670) and it covers the 7, 21, 28 and 50 Mhz bands. Like the first unit, the 670 has two traps in the vertical section. However instead of wire radials it uses 4 self supporting rods, each resonant on one band. It appears that all except the 6 meter radial have a loading coil, at the point where they are attached to the vertical element. Power is rated at 300 watts on this antenna and the length is about 11 feet. Price \$185 (not cheap, but the #670 is the only thing like it in the U.S.) NCG Co., 1275 N. Grove Street, Anaheim, CA 92806

3. YAESU FT 103R 220 HT: The #103, like its brothers for 144 and 440, features an output of 2 1/2 watts, and is available with a tone pad at extra cost. One thing not found on many of the HT radios is an S meter which reads power out on transmit. Built in VOX can be used with the YH 2 mic/headset for no hands operation. This would lend itself to mobile use with the MMB 21 rig holder. This holder has a lip that slides into the window slot on the car door, which gives the rubber duck antenna on the HT a fairly clear shot through the window. Price \$265 (\$270 w TT)

* * *

THE ARRL LETTER

PRB-1 WINS ONE FOR AMATEUR RADIO!

The US Court of Appeals for the 6th Circuit has ruled in favor of radio amateur WM4T in the case of Thernes v. City of Lakeside Park, Kentucky. The lower court, the US District Court in the Eastern District of Kentucky, had upheld a municipal ban on amateur antennas because they were not specifically permitted as accessory uses within the city. The Appeals Court majority opinion found that the district court's judgment should be vacated, and it remanded the matter (sent the case back) to the district court for reconsideration. The dissenting judge of the three didn't think this strong enough: he would end the case at once by reversing the lower court and declaring the city's ordinance unconstitutional. The real hero in this action? FCC's Memorandum Opinion and Order in PRB-1, the release of which was expedited in the hope of turning the tide in the Thernes Case.

So, okay -- it's not "over" yet, because the lower court must reconsider its verdict as ordered by the Appeals Court. We hope that this will be a matter of course. And there's the matter of recovery of legal expenses by the plaintiff'appellant. But it's safe to say that PRB-1 works. Which case is next -- and where?

SWAP SHOP

WANTED: Kenwood TV506 6 mtr xverter
any condition.

CONTACT: Dave Hackford, N3CX
Phone: 215-679-7293
215-483-2030

FOR SALE: Cassette tapes 3 for \$1.
Empty 5 in. tape reels 6 for \$1; Yaesa
No. 40 Kerosene Heater - Center of room
type \$15. 432 Mhz converter, Park
type \$20. Funk & Wagnall new standard
Encyclopedia 26 volumes \$15.

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

FOR SALE: Computer System Package -
Radio Shack color computer 64K,
disc drive, TP10 printer like new
w/software, books, cartons inc.
\$275. Drake TR22 & Heath HW16-
\$100 takes both.

CONTACT: Russell Sutton, W3MY
Phone: 215-860-1383

FOR SALE: Inventory of VHF Equipment
at substantial savings - i.e. Amps for
144,220, 430 Mhz; Santec products and
some other items.

CONTACT: K3WJB, Drew
Phone: 215-331-3014 after
1 PM or evenings.

FOR SALE: Yaesu FT221-2 mtr AC&DC all
mode xceiver w/145 Mhz repeater set-up
\$295. Kenwood 6 mtr all mode Inc. FM &
5 channel scanner w/split VFO - 21,24,
28 & 50 Mhz bands \$375.

CONTACT: Charlie, K3BCV - 847 N.
LaCrosse St., Allentown, Pa.
17103
Phone: 215-432-2805

FOR SALE: Yaesu 480R - 2 mtr. all mode
w/up & down scan, Mic - good condx. \$300

CONTACT: Frank, K3TRM
Phone: 717-636-0227

FOR SALE: Heath SB-104A w/CW filter, no spkr.
supply, exc. condx. \$200 or B.O. Swan 500 w/
spkr, supply & D104 mic belongs to K3KTY \$300 or
B.O.

CONTACT: Mike, N3BBI
Phone: 717-325-3580

FOR SALE: Icom IC27-H - 2 mtr FM (45 watts)
mint \$250; Icom 505 - 6 mtr SSB/CW (10 watts)
mint. \$225.

CONTACT: KA3B, Harry A. Schools
1606 S. Newkirk Street
Phila., Pa. 19145

FOR SALE: Maki Denki 1296 Linear Amp. 1 watt in-
10 out; 2 watts in - 20 out \$200. WANTED: New
or used old style KLM 2 mtr 16 ele. beam - not
LBX model.

CONTACT: Ron, KB3QM - P.O. Box 73, Bethel, DE
19931
Phone: 302-875-7373

FOR SALE: Hewlett Packard model 618B - 3.8
to 7.6 Ghz signal generator - w/manual \$50.
Lavoie Spectrum Analyzer - 10 Mhz to 44 Ghz
w/manual \$100

CONTACT: Ron, K3ZKO
Phone: 215-379-5338

FOR SALE: Hammurlund HQ-180 general coverage
rcvr \$200, has built in clock. vy good shape.
Heathkit: HW-16 3 band CW,xcvr, 75 watts
(20,40,80 mtr) \$65; HR-10B ham band rcvr 10
thru 80 \$55; SP-600 external spkr w/cabinet \$25.
sixer, 6 met. xcvr \$10; Console..clock, P.P.,
swr etc. \$50; Heath SB310 rece. \$120. Drake:
TR-6 6 mtr xcvr \$325; MS4 spkr \$45; FL-250,
FL-1500, \$40 ea. NB-4 noise blanker for R4C \$110;
NB-7 for TR7, new \$65; Aux-7 board for TR-7 \$65.
MISC: Ham Keyer 5A \$35; Heath HA-10 keyer w/
paddle \$35; Utica 650 VFO \$10; Hallicrafters
mobile spkrs. \$25 ea. SBE-144 2 mtr xcvr \$75
xtal control. Kenwood TR-7950 2 mtr xcvr \$275;
Yaesu SP-107P spkr/phone ptc \$55. Kenwood PC1-
phone/patch \$59.

CONTACT: K3UKW, Tony Musero
Phone: 215-271-8898

COMMERCIAL ADS

George Washington Special - 1986 subscription to VHF Communications regularly \$18.00/year
now for \$16.50 to Packrats and friends of Packrats. Order must be postmarked not later
than 22 Feb. 1986. UV Comms P.O. Box 432, Lanham, MD 20706

Loop Yagis: 902Mhz and 1296 Mhz 45 element \$70; 2304 Mhz \$62.50. Also available assembled
and tested. Power dividers, stacking frames available. Linear Amplifiers; 1296 Mhz,
1 watt in 18 watts out \$230; 2304: 1 watt in, 10 watts out \$300. Write for more informa-
tion to: Down East Microwave, Bill Olson, W3HQT, Box 1655A, RFD 1, Burnham, ME 04922
(207) 948-3741.

From the American Radio Relay League, Inc., Assistant Section Manager

January 13, 1986

Harry Stein, W3CL
2087 Parkdale Avenue
Glenside, Pa. 19038

Dear Harry:

It's been reported that during the contest weekend, some VHFers were trying to operate on 145.0 Mhz. They were being bothered by some strange noises nearby and so turned on the linears. They supposed it was a leaky cable system making blatzing noises.

Well, the strange noise was packet radio digital data on 145.01, and the result of the voice activity nearby was devastating to packet communications. As editor of a major VHF club newsletter, might you be willing to publish in a forthcoming "Cheese Bits" something about the frequencies where packet radio operates? I think you'd be doing both packet operators and VHF testers a favor.

Packet radio in the Delaware Valley (and usually elsewhere, too) operates on 145.01, 145.03, 145.05, 145.07, and 145.09 Mhz. Voice operation in that part of the spectrum blows packet communications away. The packet equipment, as you may know, samples the channel and will not transmit until the channel has been silent for a specified length of time. When there is voice activity, such as contesting, that bleeds over into the channel, the packet equipment will NEVER transmit! If it does get a quiet period long enough to transmit, a later voice transmission will probably interfere. Packet radio re-transmits until error-free communications is achieved up to a certain number of tries. Then the communications "times out." Under interference conditions, timing out is almost inevitable.

Not all VHF operators are aware of the packet sub-band, so it's a case of needing to educate people. Nobody claims there is anything malicious going on. Packet operators and VHF testers can all enjoy operating without bothering each other, if we can get the word out.

Any help you can give through "Cheese Bits" will be greatly appreciated.

73,

Kay Craigie, KC3LM
ASM EPA

(Tnx Kay)

* * *

VISITOR - JANUARY 16, 1986 MEETING

KN3LQU - E. Rohrbach, Kempton, Pa.

* * *

NOTICE:

If you are interested in getting in on a procurement deal for 9913 coax cable and appropriate connectors, get in touch with Ron Whitsel, WA3AXV as soon as possible.

CHANGE OF ADDRESS

W3PST - Woody Haldeman
125 Keeley Avenue
New Britain, Pa. 18901
215-345-1890

W0RSJ - William Murphy
338 Paxinosa West
Easton, Pa. 18042
201-234-6771 (work)
215-252-3956

Mt. Airy VHF Radio Club Inc.
 "THE PACKRATS"
 January VHF Sweepstakes Contest

LOGS SUBMITTED 59

(PRELIMINARY)

1986 GROSS SCORE

1795584

CALL	BANDS (CONTACTS AND GRID SQ.)										TOTAL GS	TOTAL SCORE	
	50	144	220	432	1296	2304							
K3ACR	134	28	196	21	69	3						52	24336
W3AJF			29	3	25	2						5	395
N3AOG			159	19	58	2	48	7	23	2		30	13890
W3AQA	91	13	89	6	73	2	52	4				25	10750
N2AQJ			90	2								2	180
W3AXV	174	41	340	31	142	19	141	19	53	9	16	121	171820
N3BBI	176	38	173	29			55	11	22	6		84	45948
K3BFP	63	10	71	9	48	2	51	5	25	2	10	30	15360
W3BRU	62	4	88	10								14	2100
* W3CCX	79	6	232	21	75	2						29	13369
W3CJU	56	11	67	4	49	2	42	5				22	6710
W3CL	76	10	106	10	100	4	74	9				33	17490
N3CX			136	16	70	11	44	9	37	6	15	44	27808
W3CXU	10	2	30	5	37	2	18	5	14	2		16	3296
K3DLS					52	2						2	208
K3DMA	68	7	149	12	59	2	42	3				24	10056
WB3DNI			178	17	35	2	64	9	26	3		31	14880
N3EAX	92	34	159	32			34	10				76	24244
W2EIF	72	11	155	20	96	12	84	13	29	3		59	41477
K3EPB	31	3	68	5	30	2						10	1590
K3ESJ			213	14	72	3	71	7				24	11976
K3GAS	37	2	36	2	30	2	20	3	5	2		11	2123
W2GGB			101	2	34	2						4	676
K3GYS	86	10	285	21	53	6	62	7	19	2		46	31142
W3GXB			172	15	29	2						20	4600
W3HFY	59	7	131	43	56	3	60	5	5	2		60	26520
WB3HHD			100	2	52	2						4	816
WA3HIT			50	2	44	2						4	552
W3HK	41	6	20	5	28	2	14	2				15	2175
WB3IGR	98	14	176	16	70	2	66	5				38	20748
W3IIT	93	18	186	15	78	2	65	8				43	24295
WA3IMT	51	6	22	2								8	584
* WB3IND	80	9	103	11								20	3660
K3IUV	68	11	166	13	102	6	103	14	13	2		46	32016
WA3IWT	32	6	55	8	52	6	31	3	19	2		25	8225
K3JJZ	75	16	168	12	58	2	63	7				37	17945
KA2JKI	66	13	114	19	42	13	46	10	19	5		60	26040
WA3JUF			133	19	57	2	64	12	47	10	11	45	29295
WB3JYO	179	43	275	28	81	14	62	7	38	5	6	99	93060
* W3KKN	128	16	250	26	105	10	74	13	36	5		70	61600
K3LOM	180	37	250	24	59	3						64	35072
K3LYB	123	16										16	1968
KA3MGB			9	3								3	27
K3MXM	59	3	116	12	46	2						17	4539
W3NSI			100	12	73	2	51	5				19	6612
WA3NUF	109	22	182	16	85	17	111	17	41	6	13	80	76080
AK3D	80	12	227	21	86	10	82	8	33	3	10	56	47880
* WA2OMY	203	52	393	38	134	18	141	20	44	7	12	137	194266
WB2ONA			99	15			38	6	3	1		22	4114
K3PHY			151	4	50	2						6	1506
KB3QM	146	46	127	23	48	13	74	17	7	5		104	56680
W0RSJ			63	15			40	5	19	2		22	4818
* N2SB	345	74	757	52	168	21	214	30	57	11	15	192	425088
K92T	108	16	159	18	42	10	34	7				51	21369
K3VIT			37	5	23	2	24	2				9	1179
WB2VLA	51	7	94	14	45	2	33	3				26	7826
K3VYG	52	5	68	7	65	3						15	3750
WA3YDZ			58	8			35	6				14	1792
* WA3YUE	153	28	258	21	77	9	73	9	29	2		69	57063

W3CCX - WB3CTP, K3DLS, K3EOD, WA3FOF, K3HW

* Multi-Ops: WB3IND - W3KM / W3KKN - W3CXU / WA2OMY - AA2Z / WA3YUE - K2EVW

N2SB - KM3T, WB2NPE, WB2RVX, WB2YHA, WA2VYA, WB8ZAR + NET

TID BITS

Sunspot No. for December 1985 = 17.2 - Smoothed No. for June 1985 = 17.5.

It was good to see W3KM, Bill Benner looking well after his recent injury while trying to repair his roof antenna system.

Received the weekly report from our man in Florida, K3KTY right after the contest. Reports that there was nothing on 6 meters and very little on 2 meters. Enjoyed his recent visit in the Delaware Valley area.

Zack Schindler, N8FNR reports a recent purchase of an Icom IC-271A along with the AG-20 interval GAASFET pre-amp which was offered for \$1.00 when purchased with the radio (Amateur Electronic Supply) Tests showed that the noise figure wasn't that great, but for \$1.00 who can go wrong - hi!!

* * *

A NOTE FROM THE CONTEST CHAIRMAN

I appreciate the membership that got on for the contest and their efforts. I hope everyone had a good time - looks like the score is a good one.

See you next year in the January VHF SS.

73, Dave, N3CX

* * *

CONTEST HIGHLIGHTS (See Photo Page 10)

The January 1986 sweepstakes was one of the best fun events in our area - everyone reported unusual courteous operations on all the bands - a rather unusual event.

24 Pack-Rats operated on 1296 Mhz; 9 were on 2304 Mhz and N2SB got 903 Mhz and 10 Ghz going for the first time in a January Contest.

Single operators high three in the Club were The "King" - WA3AXV; The "Prince" - WB3JYO; and the "Duke" - WA3NUF!!

Our multi-op stations racked up a total score of over 750,000 points.

Crying Towel winner WB3DNI suggests you should never leave your operating position to answer a telephone caller (a friend?) and lose your frequency spot.

Runner-up N3CX (Contest Chairman) wants you to know what a flock of grackles can do to a 1296 loop Yagi antenna system.

WB8ZAR, one of the operators at N2SB, still doesn't know the difference between meteor scatter and the popping sounds of someone eating popcorn in the shack.

WA3AQA reported rig break downs and antenna rotator problems right before the contest and everything cleared up miraculously just when the bell sounded at 1900 hours UTC.

W3AJF, reported that this was his 36th January VHF SS participation.

KA3MGB after spending over \$1,000 on a new tower installation had his 726R breakdown before the contest. Don rushed to a supply house, bought a 2 meter rig and managed to work 9 contacts in 3 grids - say not so in mournful numbers!

W3CL read the following "Crying Towel" headline from the now defunct Phila. Evening Bulletin of January 17, 1968 -- "Pack Rat tears Flood West Oak Lane".

W3KKN, made an outstanding QSL card presentation to K3GAS for working each other on 1296 Mhz after many years of trying.

W3HK, did fairly well in the contest squeezing in contacts between nursing duties for his XYL Gracie. (Gracie is slowly improving after a recent stroke).

W3GXB finally came back into contest activity after an absence of 18 years. He had fun.

K3EOD, operated at W3CCX multi-op station after an absence of 10 years from the VHF bands.

K3IUU, made a Video Tape of the "Crying Towel" meeting - it was fun viewing the tape with Berts' outstanding commentary at the wrap-up session at W3ZD's QTH on January 25th.

Many thanks to Dave hosting the meeting and the large turnout of club members who gave a helping hand.

BELATED CRYING TOWEL

On Monday, January 27th, Pete, K1PXE couldn't get out of his driveway due to a garbage truck parked there - tried to by-pass the block and got stuck in the mud - he didn't get to work!

FROM THE ARRL LETTER JANUARY 16, 1986
Gains and Losses at the Microwaves

FCC has added the 47.0 - 47.2 GHz, 76-81 GHz, 119.98-120.02 GHz and 142-149 GHz bands to the amateur rules. The Commission not only giveth, it also taketh away: removed from the Amateur Radio Service are the 1215-1240 MHz, 48-50 GHz, 71-75.5 GHz, 165-170 GHz and 240-241 GHz bands.

In addition, these WARC-79 related amendments, in PR Docket 85-23, change many of the interrelationships between the Amateur Radio Service and other radio services. These changes have been made to complete implementation of the Final Acts of the World Administrative Radio Conference, Geneva, 1979, which comprise an international treaty and which were ratified by the United States on September 6, 1983.

This action will be effective 0001 UTC March 1, 1986; watch QST for particulars.

* * *

CORRECTION AND ADDITIONAL INFO FROM KS2T

I have a correction for you. In the last Cheese Bits on page 8 there is written; "Jay Miller, KS2T, advises that G4GLT will be allowed a 24 hour use of 6 meters sometime in Mid March '86". This is not totally true, the following is true from information supplied to me by Dave/G4GLT. This is it' As of 1, February, 1986 we should have 24 hour operation here in the U.K. on 50 Mhz.

The guys in the U.K. who currently have permits to use 6 meters now will have use of the 6 meter band 24 hours as of 1, February not just G4GLT.

G4GLT also believes that in time 6 meters will be available to all hams in the U.K.

I've heard that they already have 24 hour use of the band as of January '86. I've also heard that this 24 hour use will be restricted to 50 - 50.5 Mhz even though their 6 meter band is from 50-51 Mhz. Also I heard that their power will be limited to what turns out to be about 160 watts output at the antenna. I'm not sure if thats DC or P.E.P.

I also received the MUTEK 6 meter transverter model TVVF 50a, it should be on the air by the time you read this, in time for the contest anyway. I'll give you the specs, but they are just typical performance data and seem to be on the conservative side. It is 12 1/4 inches wide, 6 1/2 inches deep (7 inches counting the SO-239 sticking out) and 1 1/2 inches high. Rubber feet, 2 BNC and a PL-259 connectors as well as the power, T/R connector are supplied with the unit. It can be RF switched or 'hard keyed'. It requires 13.8 volts at 4 amps. Typical performance data; RECEIVER: Noise figure 3.0 db, conversion gain +20db (gain control max.) A note on this Harry, the gain can be varied from 5 to 20 db so it can be "optimized" to the HF rig. Input 3rd order intermodulation intercept point 0 dbm, Bandwidth 50-54 Mhz +2 db.

Transmitter; Power output 10 watts pep. Output 3rd order intermodulation intercept point +55 dbm Harmonic spurious -65 db pep Non-harmonic spurious -65 db pep. Local oscillator; Frequencies 22 and 24 Mhz Accuracy +/- 1kHz at 20C Noise sideband performance -145dbc/Hz at 10kHz offset.

* * *

NOTICE

ANY AMATEUR who lives in or has ties with N.J. can have a packet of 500 attractive state QSL cards, at a \$3.00 charge for postage and handling. The design lets you insert your own call on the card. Make checks payable to the Department of Commerce and Economic Development, CN 820, Trenton, N.J. 08625-0820.

* * *

FILLER

Let us never forget that the government makes its money the old fashioned way...they tax for it.

Nature makes blunders too. She gives the biggest mouth to those who have the least to say...



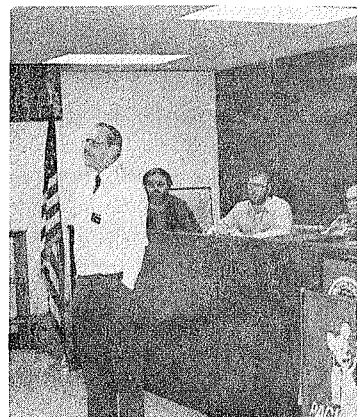
WA3AQA



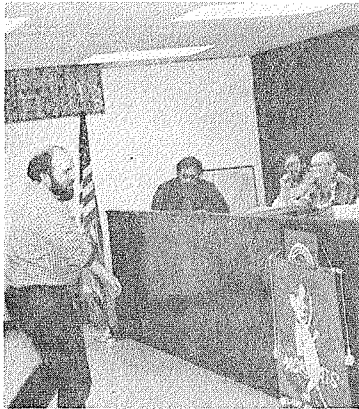
JUDGES - N2SB, WB2NPE, K3MXM .. PREZ - WB2RVX



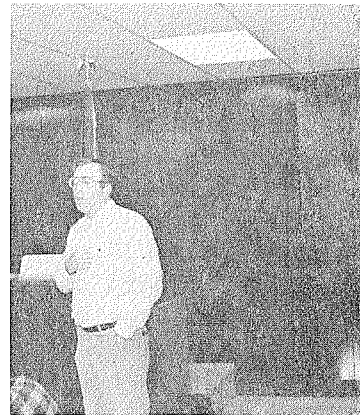
"CRYING TOWEL WINNER" - WB3DNI



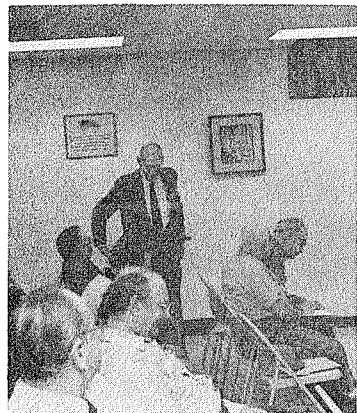
KA3MGB



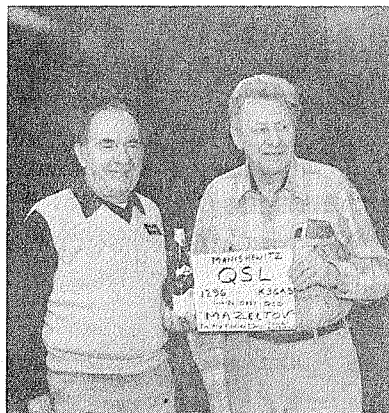
CONTEST CHAIRMAN - N3CX



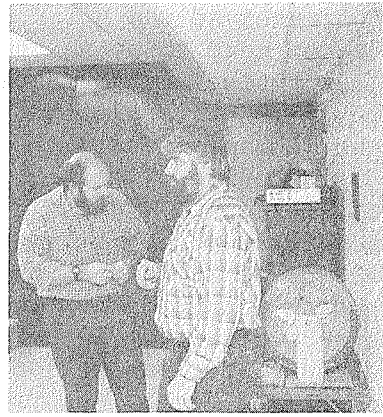
WBSZAR



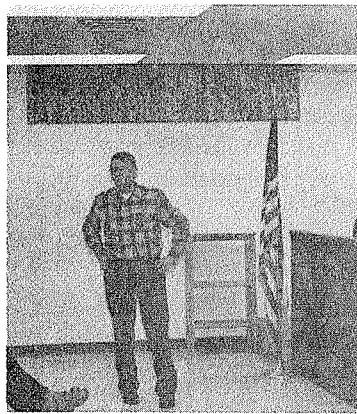
W3A1F



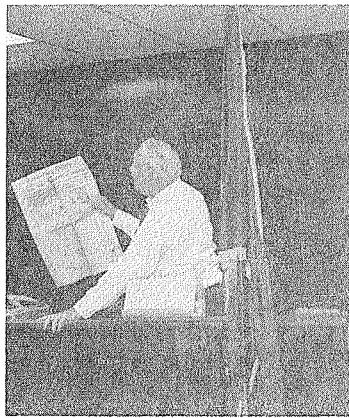
W3KKN - K3GAS



N3CX - WA3JUF



W3GXB



W3CL



K3EOD

DOWN EAST MICROWAVE

BOX 1655A - RFD #1
BURNHAM, ME 04922

Microwave Antennas and Amplifiers
by W3HQZ

902 1296 2304 3456 MHz.

Bill Olson (207) 948-3741

73 Amateur Radio's Technical Journal

PO BOX 931
FARMINGDALE, NY 11737

\$25 one year \$53 three years

NE 7-8929

GEORGE S. VAN DYKE, JR., P.E.
CONSULTING ENGINEER

W3HK

4607 CONVENT LANE
PHILA., PA. 19114



AMIL S. GUMULA
PRESIDENT

A. G. RADIO PARTS CO.
939 TOWNSHIP LINE RD.
ELKINS PARK, PENNA. 19117
TELEPHONE: 215-886-6100

RCA Authorized
Distributor

(302) 328-7728
ORDER LINE 800-441-7008



Delaware Amateur Supply
"AMATEUR SALES AND SERVICE"

PAUL WA3QPX
KATHY KA31Y0

71 MEADOW ROAD
NEW CASTLE, DELAWARE 19720

AMATEUR
SALES & SERVICE

(215) OL 9-5900

"HAM" BUERGER INC.
Communication Specialists

BOB HERSHMAN
WA3ZID

68 N. YORK RD.
WILLOW GROVE, PA. 19090

215-342-5982

WA3HIT

Paul and Betty Rilling

INCOME DIVERSIFICATION

5830 Weymouth Street -Phila., Pa.19120

The Ham Radio Publishing Group



Greenville, NH 03048 (603) 878-1441

HAM RADIO - the Technical Ham's
Magazine. Ask for a free sample
copy or our Book Catalog.

CALL DOC CUTLER (K3GAS)
FOR YOUR ELECTRONIC NEEDS

NEW, RECONDITIONED, OR AS IS.

LOW PRICES

by appointment

215-635-1078

CARL BARISH

**PRINTECH
PRINTING** 13620 NE 20th Suite D
Box 4247
Bellevue, WA 98009
746-8000



**NESHAMINY
TRAVEL
SERVICE**

Harriet Soltoff
Home: (215) 947-4483

xy1 K3IUV

2337 Neshaminy Blvd.
Bensalem, PA 19020

BROWSING - THURS. 7⁰⁰ - 9⁰⁰ PM
SAT. 9⁰⁰ - 4⁰⁰ PM

Doy-Nite (215) 455-2121

FERTIK'S ELECTRONICS

Components & Equipment

LEON FERTIK

5400 ELLA STREET
PHILADELPHIA, PA. 19120

LUNAR, MICROWAVE MODULES, ARCOS, ASTRON, KLM
TAMA, TONNA F9FT

THE VHF SHOP

TOM KQ3R
18 South Mt. Boulevard
Mountaintop, Pa. 18707

(717) 474-9399
M - F after 6:00 p.m.
Weekends Anytime!

EASTSIDE SURPLUS SALES

12894 NE 15th PLACE
BELLEVUE, WA 98005

(206) 453-0795

Carl Barish
KC7ZC

A CANDY STORE OF PARTS FOR THE EXPERIMENTER.

(302) 328-7728
ORDER LINE 800-441-7008



Delaware Amateur Supply
"AMATEUR SALES AND SERVICE"

ROB WA3QLS
GAIL KA31TN

71 MEADOW ROAD
NEW CASTLE, DELAWARE 19720



Jenkintown & Glenside Electric Co.

WA3WLQ

220 YORK ROAD
JENKINTOWN, PA.
TUrn 4-0375 - 4-1050
WA 7-4325

Wilson Electronics Corp.

Xcelite

Service Since 1956

215-659-5900

68 N. YORK ROAD
WILLOW GROVE, PA 19090

"Right in the middle of a lot of good company!"

Electronic Equipment Distributor

"HAM" BUERGER, INC.

If we're judged by the company we keep, we should do pretty well!

TELEX

SPRAGUE

AMPHENOL

CUSHCROFT

TAB BOOKS

TEN-TEC

TRW

VIBROPLEX

BEANCOAT

"W2AU"

Larsen Antennas

ASTATIC

ROHN

HAM-KEY

hy-gain

Saxton

ICOM

GFS

COE

DRAKE

Miller

Waldom

callbook

LMB

GILFER

nte

Weller

TPL

MISCO

Vector

HUSTER

MAGCO

SWMAN

AMPCO

RDMAR

COVER CRAFT

AMP SPECIAL INDUSTRIES

TGR

BY

DRINK

communications specialists

Cheese Bits
2087 Parkdale Ave.
Glenside, Pa. 19038



MEETING NOTICE

MT. AIRY
VHF
RADIO
CLUB,
INC.

W3FQD
DICK HUNTZINGER
130 FAIRHILL DR.
CHURCHVILLE, PA. 18966

PACK RATS

FIRST CLASS