

PACK RATS'



PACK RATS

CLUB CALL: W3CCX

MT. AIRY VHF RADIO CLUB, INC.

CHEESE BITS



MT. AIRY VHF RADIO CLUB, INC., PHILA., PA. ARNS
50.2, 144.2, 432.1, 1296 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 XX

NOVEMBER, 1978

NUMBER 11

THE PREZ SEZ

The biggest Pack Rat event of the year, the Hamarama, is over for another year. In spite of inclement weather, the cars just kept rolling in. Chairman, Ron, WA3AXV, breathed a sigh of relief when the rain finally stopped, mid-morning, and the event proceeded to be one of the most well-run and successful Hamarama's ever. It was gratifying to see how many Rats came out to help. There were over twenty at the diner Sunday Morning at 5 A.M., ready to help set up. Spirits were high all day and all who helped went home that night feeling like part of a winning team.

The Pack Rats are one of the best teams around. There aren't very many clubs around that could put on the Hamarama, send a successful EME DXpedition to South America, hold weekly nets on five bands, consistently score in the top three in the June Contest, and (here's the punch line) win 18 consecutive gavels for club competition in the January VHF contest. And all with under 100 members!! Nobody expects an equal committment from every member, but each member should help the "team" to the best of his ability.

This year, more than ever, the club needs your support and help for the January Contest. Are you doing your best to help the team?? Let's put our excuses and petty differences aside and get together and do a bang-up job this January. We need every member's score no matter how big or small!! 'Nuf said.

The October meeting was well attended and featured a newly revitalized "Mario Raffle" and an excellent program on impedance matching by Walt, K3BPP. Three new members were voted in and a fourth application was read to the membership. Look's like there's still a few true VHF'ers out there. Any more? See you in November.

73,

Bill, W3HQT

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

Subscription Rate - \$2.00 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.

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 - ME 5-1078

PRINTER:

WA3FOF, Ralph Alexander
2600 Cheltenham Avenue
Philadelphia, Pa. 19150
215-276-4185

TYPIST:

WA3TEM, Marsha Lissauer

TRUSTEE OF CLUB CALLS: W3CCX-WR3ACD:

WA3AXV, Ronald Whitsel
209 Frog Hollow Road
Churchville, Pa. 18966
215-355-5730

AWARDS CHAIRMAN:

W2EIF, Joseph Kilgore
#5 Sunnybrook Court
Stratford, N.J. 08084
609-783-9478

CLUB HISTORIAN:

W3CL, Harry B. Stein

OFFICERS: 1978-1979

PRESIDENT: W3HQT, Bill Olson
VICE-PRES: WA3NFV, Dan Mitten
COR. SECY: WB3HHO, Paul Randolph
REC. SECY: K3IGX, Dick Boyle
TREASURER: K3GAS, Doc Cutler

DIRECTORS:

W3HMU, Tony Souza (Ex-Officio)
W3IIT, Harry Brown (2 years)
WA3JUF, Dave Mascaro (2 years)
K3MWV, Dick Pierce (1 year)
WB2SZK, Randy Bynum (1 year)

MONDAY NIGHT NETS:

144.2 MHZ 7:30 PM
50.2 MHZ 8:30 PM
221.4/224.58 MHZ 9:00 PM
1296.3 MHZ 9:15 PM
432.1 MHZ 9:30 PM

NET CONTROL

W2EIF
W3CL
K3GAS
W2EIF
K3IUW

FRIDAY NIGHT ATV NET:

439.25 MHZ 7:00 PM

PACK RAT REPEATER - WR3ACD - 222.98/224.58

Churchville, Pa.

1-302-478-2757

AMATEUR
and
ADVANCED
COMMUNICATIONS

"Gisele"
K3WAJ

G. B. WALLS

3208 CONCORD PIKE (RT. 202)
WILMINGTON, DEL. 19803



PENNSYLVANIA
INSTITUTE OF TECHNOLOGY

PAUL D. MERCADO - W3FBF
FCC AMATEUR Instructor COMMERCIAL
LICENSE INSTRUCTION

(215) FL 2-7100
(215) JA 8-6998

414 SANSOM STREET
UPPER DARBY, PA. 19082

215-674-0300



LAFAYETTE RADIO ELECTRONICS
"Associate Store"
537 Easton Road
Horsham, Pa. 19044



Bruce Clark

CALENDAR OF COMING EVENTS

Syllabus by Lee, K3MXM

NOVEMBER

- 4 WARA Dinner, Warrington Motor Lodge, Rt. 611, Warrington, Pa.
Speakers, Harry Dannals, W2HD, President ARRL
Joe Welsh, K3CT, Phila. Office FCC
Reservations, WB3HAZ, Tony, P.O. Box 253, Warrington, Pa. 18976
- 5 HK1TL Moonbounce Team will present its famous slide presentation
to the Holmesburg ARC, at the Newportville Firehouse at 10 AM.
The Firehouse is located on New Falls Rd. just South of Rt. 413.
- 7 Election Day, be sure to make your voice and opinion count, go
out and vote. To our Pa. Friends - Sorry the bars are closed all
day.
- 9 Board of Directors Meeting - QTH, W3ITT, Harry Brown, 3012 Potshop
Road, Norristown, Pa. If lost, call 584-4846. Directors and
interested parties always invited. Bring your ideas and gripes along.
- 10-12 ARRL Hudson Division Convention, Playboy Club, Great Gorge, N.J.
A nice way for a nice weekend and a nice Hamfest...
- 11 Veteran's Day. As an ole timer, I still call it Armistice Day.
- 12 R.F. Hill ARC Hamfest, N.G. Armory, Sellersville, Pa. A good
indoor local Hamfest. Less than 1 hr. away. Talk-in 146.28/88.
All day. Interesting prizes. How many MPG for a 50 ton Tank???
- 16 General Club Meeting, Southampton Free Library, Street Rd.,
Southampton, Pa. The Mario Raffle. Frankie's Silent Auction,
Refreshments, Open meeting to one and all. Bring your friends.
Program to be announced on the Monday Nite Nets.
- 18 Phila. Area Computer Society 2nd Annual Game Festival, LaSalle
College Ballroom, 20th & Olney Aves., Phila., Pa. 10 AM to 6 PM
Free Admission. Come on out and see what is new in the computer
world. Try your hand on some of the newest games and tests.
- 18 Converter and Preamp Clinic (See notice by W3IIT)
- 22 President Kennedy Assassinated 1963.
- 23 Thanksgiving. Easy on those extra portions. Watch that belt line!!
- 26 Columbia ARC Hamfest Laurel Raceway, 3 miles North of Laurel, Md.
on U.S. Rt. 1

DECEMBER

- 21 220 Mhz Rig Tune-Up (See notice by W3IIT)

ADDITIONAL JOTTINGS BY LEE, K3MXM

Almanac's Outlook Bleak for Winter. The Old Farmers Almanac claims an 80 percent track record in weather forecasting warns that cold waves will grip the nation through February. "Expect chilled noses and toes", Abe warns in his Dec. forecast. Abe warns of an ominous development in late January that may compare with the big blizzard that socked the East Coast last winter.

NEW PRODUCTS OF INTEREST TO HAMS

By Lyn, W3NSI

1. General Coverage Receiver: Radio Shack will start sales on the new DX300, receiver in November of this year. This receiver features digital readout and thirty 1 Mhz segments. Triple conversion is used, with the first stage going up to 54.5 to 55.5 Mhz. Frequency coverage is 10 Khz to 30 Mhz. Unit is all solid state and can be used from built-in AC supply, 8 "C" batteries, or an external 12 VDC supply. Price \$380.00.
2. General Coverage Receiver: Lafayette Radio will soon have available its own communications receiver to compete with the above from Radio Shack. The BCR 101 is a 6 band unit using regular tuning and drum dial readout. Coverage is from 170 Khz to 30 Mhz, with dual conversion being used on the bands above 3.5 Mhz. This receiver is a bit more compact than the R S DX300 and costs about \$130.00 less. Price \$250.00.
3. Counter Kit: DSI is now advertising a "Quik-Kit" #3550 counter featuring coverage to 550 Mhz. The unit uses an 8 digit readout and operates on 6 "C" batteries, or an AC battery eliminator. The counter board and time base are factory assembled and tested, with all other parts supplied to finish the unit in about 2 hours. Price \$100 - DSI Instruments, Inc., 7914 Ronson Rd., No. G, San Diego, California 92111

* * *

VHF/UHF REPORT

By Jo, W2EIF

The Six and Two meter bands have settled into the normal low activity that usually follows the Summer DX season on six and the tropo season on two.

There have been a few E_s openings on six but nothing worthy of note from the Phila. area. However, October 18 produced some unusual activity. In the AM, about 10:30 to 11:00 A.M. EDST, some FM stations appeared from the South. These turned out to be HK4KL, HK4KM, HK3RJ and HK3YM. They were at 50.125 and 50.130. Also, when HK4KL was being heard at 50.125, he was also copied at 50.080 with squelch tails being heard. Apparently, a repeater is being operated at 50.080. W3HFY using the Kenwood 6 meter AM, FM SSB unit and an amplifier worked 3 of the HK4's. Randy using the same unit with no amplifier worked HK4KL, and W2EIF using the old 200 W AM rig worked HK4KL.

SSB was useless. WA8IPI/4 from S.C. was heard very strong on back scatter, but he did not hear the Columbia S.A. stations. It is thought that the condition was due to sporadic E.

The six meter band was also open most of the same evening with stations from S.C., N.C., Tenn., and GA. very strong. This evidence of short skip did not produce any contacts on 2 meters.

Let us hope this activity is a forerunner of things to come in the next 2 months!

* * *

6 METER DX NOTES

Submitted by Jim Holt, N3AHI

The following stations are on 6 meters from Alaska:

Anchorage

AL7C (Ex KL7IFD)
KL7CDG
KL7EOU (24 hrs. on 50.110)
KL7HMH
KL7WE
KL7JAI

Fairbanks

KL7AG
KL7DJ

KL7AZJ

Ketchikan

KL7IBG
KL7IFP

The following station on 6 meters from Bermuda, VP9CQ.

6 Meter DX Notes continued

Bob Reid, W8PSD/VP2S from St. Vincent, P.O. Box 265, W. Indies sent the following schedule to Jim, N3AHI. Frequencies monitored as follows:

Mon. Wed. Fri. - 8:30 AM - 12 Noon - 14.300
Tues. - Thurs. - 8:30 AM - 12 Noon - 21.400
Mon. Thru Fri. 8:30 AM - 12 Noon - 50.110
Thurs. thru Sat. 7:00 PM - 11 PM - All 3 frequencies
Mon. Thru Fri. - 1:00 PM - 4:00 PM - 28.520 & 50.110

All Times EST.

* * *

CONVERTER AND PREAMP CLINIC - By Harry W3IIT

Get ready for the Contest. There will be a converter and preamp clinic on Saturday, 18 Nov. at 10 AM at the QTH of Bert, K3IUV. Everyone is invited. Gain and noise figure will be measured on your latest (and old) low noise creations. If you plan on using it in the contest, bring it and we'll find out how good or bad it really is and you'll have some idea on what improvements are needed. While you're at it, build one of the WA3AXV preamps described in the October Cheese Bits and we'll check it out for you - they're really simple and parts are readily available. You can't work 'em if you can't hear 'em.

* * *

220 Rig Tuneup - By Harry, W3ITT

Hopefully, the new crystals for 220 will soon be here and you'll have them on frequency (hopefully the right frequency). Since everyone doesn't have one of those magical digital frequency counters, we'll have a setup at the December meeting to get you right on. Bring your rig, crystals and power cable - the power supply will be provided. We may also check power output at the same time so bring the amplifier too.

* * *

VOTED TO MEMBERSHIP

WA2DPU, William M. Smith - XYL - Vivian
47 Langdon Road
Burlington, N.J. 08016
Phone: 609-386-4504

K3LOM, Harry Brandt - XYL - Rose Ann
315 Walker Road
Ambler, Pa. 19002
Phone: 215-MI 3-2281

K3KVS - Jerry Polin - XYL - Joan
7700 Woodlawn Avenue
Melrose Park, Pa. 19126
Phone: 215-224-1990

APPLICATION FOR MEMBERSHIP

N3AHI, James R. Holt
Valley View Road, Box 536 F
Coopersburg, Pa. 18036
Phone: 215-432-8808

NEW PHONE NUMBERS

WA3NFV, Dan Mitten -- 1-215-536-8490
WA1NGR/2, Ron Allen -- 1-201-793-7627

VISITORS AT THE OCT. 19, 1978 MEETING

WB2VLA, Dave, Trenton, N.J.
N3AHI, Jim, Coopersburg, Pa.
K3LOM, Harry, Ambler, Pa.
K3KVS, Jerry, Melrose Park, Pa.

WA2DPU, Bill, Burlington, N.J.
WA3VGT, Joe, Warrington, Pa.
WB3EFO, Lee, Huntingdon Valley, Pa.

TID BITS

Hamarama Chairman Ron Whitsel, WA3AXV, thanks all the Pack-Rats and friends who did such a bang-up job at the flea market October 1st. The count was 1790 attendees notwithstanding the rainy morning. Hamarama registration Chairman, Harry, W3CL, thanks the following ladies who worked so hard at the registration, Prize and Pack-Rat "for sale" tables: Bert Kenas, W3TNP - Marsha Lissauer, WA3TEM - Jane Zimmerman, WB3DSK - Florence Power, WA2WYE - Lynne Whitsel, May Gakoumis, Lucy Mitten, Peggy Cohen and Wendy Simpson.

Congrats to K1KO, WB3JLF, son of Socrates N3SM on obtaining his General!

Charley, K3HSS, one of our ex-presidents, was injured in an auto accident some time ago - now feeling better.

Received word that Jim Perkins, W3SMK back in the Abington Hospital with a "ticker" problem. A speedy recovery Jim OM.

When cruising thru Jenkintown, Pa. be on the alert for Officer Michael Soltoff of the police force (son of Bert, K3IUUV). He is an expert in spotting phony drivers - hi!

Bob, WA3ZID reports that commercial motor vehicles under 9,000 lbs, may now apply for either a Ham or Vanity License Plate in Penna. Use Pa. Motor Vehicle Form #733.

K3GKB, Jesse Wagner of Wayne, Pa. won the raffle prize at the Hamarama last month.

Condolences to the family of James Barnes, K3EHQ. Jim, a former Pack-Rat died on Friday, October 20, 1978 after a short illness.

* * *

NEW SATELITE PLANNED

W9KDR, Bernie Glassmier of the ARRL staff passed along the following satellite information at our recent Mid-Atlantic States VHF conference:

Elliptical - 24,000 miles

Uplink - 435.150 - .350

Down Link - 145.8 - 146.0

Code Store - 145.805 - Beacon

Eng. Beacon - 145.995

Geostationary - Syn Com 4

Uplink - 145.6 - .7/W/12.5 Khz subBands

Uplink - 1297.6 or 1252.6 W/12.5 Khz subBands

Downlink - 435.6 - .7 Emerg. & Digital use only.

* * *

OFFICIAL BULLETIN NR 728 FROM ARRL HEADQUARTERS NEWINGTON CT OCTOBER 12, 1978 TO ALL RADIO AMATEURS BT: During a meeting held Thursday October 12, and widely publicized in advance as Personal Radio Day at FCC, the Commission directed its staff to prepare a Notice of Inquiry for a new Personal Radio Service to operate on 900 MHz. This decision was based on recommendations of the Safety and Special Radio Services Bureau that 900 MHz was preferable to other frequencies for this proposed service for the following reasons. 1. Better chance of coordination with Canada and Mexico. 2. Less television interference. 3. No present users who would be displaced. 4. Less expensive for FCC to administer. 5. More spectrum would be available. Further information will be released as it becomes available, by bulletin from this station and later in QST. AR.

* * *

Two RFI booklets written for technicians are being offered free by the EIA. The TVI booklet of 40 pages and one on audio rectification, 14. Send requests to the Consumer electronics group EIA, 2001 Eye St., NW, Washn., D.C. 20006

SWAP SHOP

FOR SALE: Clegg 27B and Clegg 611 Pwr. Supply. \$200. (Excellent condition - used as base station) Clegg 22er (AM) MII \$100.

CONTACT: George, WA3SPR
Phone: 215-924-8651

FOR SALE: Converted CB rig to 10 mtrs. USB, LSB, AM works FB. Hustler 11 mtr. ant. modified to 10 mtrs. 12 volt radio shack pwr. supply and schematic \$125.

CONTACT: Mario, W3ELX
Phone: 215-343-6816
before 9 AM and after 10 PM

WANTED: 4001 Tube, socket and chimney. Who was the tailgater at Hamarama that had this for sale.

CONTACT: Joe, N3GW
Phone: 215-HA 4-5178.

FOR SALE: HQ170A with manual. 1.8 thru 54 Mhz. AM, CW, SSB - Make offer. Hygain model 64B 4 El. 6 mtr. beam with instructions, Vy. good cond. \$18.00. 14 AVS 10 Thru 40 mtrs. Vertical with radials & hardware from 14 RMK kit - with instructions. \$15. Heath Model HO-10 monitorscope & manual \$30.

CONTACT: Gordon Vogt, K3VYG
Phone: 215-576-0273

ADVERTISEMENT: There is a new electronics dealer in Phila. City Communication Center. 2823 Kensington Ave. (Enter thru Dick's Hardware)

Specials: TS-520S - List \$799 - Cost \$674.

TR7400A	450	370
TH6DXX	289	209
ATB-34	279	209

Get a 1978 ARRL Handbook FREE with \$25 purchase "while they last" --

* * *

2ND ANNUAL MID-ATLANTIC VHF CONFERENCE

By Dave Zimmerman, W3ZD

The Mid-Atlantic VHF Conference sponsored by the Pack-Rats was held at the Fiesta Motor Lodge in Willow Grove, September 30. The event had just over a hundred registered, an increase of about 15% over last year. Favorable comment was heard from those who attended concerning the technical selections. The repeater technology forum moderated by Roger Blouch, K3WIV, provided many with an insight into the workings of the repeater art.

Elio Colussi, W3RZU, gave us some special info. into the design and construction of high-power VHF amplifiers.

Bernie Glassmier, W9KDR from the Hdq. Staff gave important info. on Oscar and certainly inspired a few to look into this form of Ham Radio.

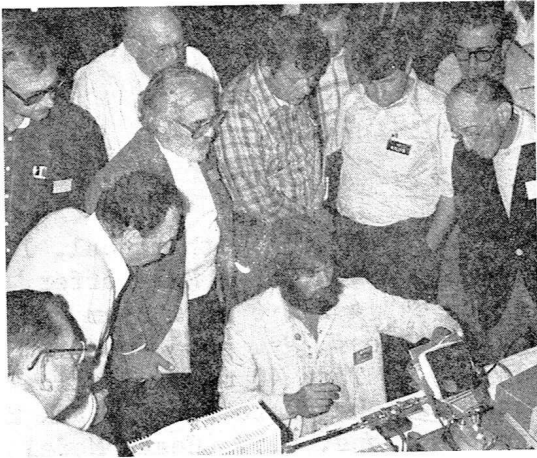
Paul Wade, WA2ZZF, told of the workings of one of the newer low-noise amplifiers, the GasFET, showed some fine samples, and let us in on the methods of building a practical unit.

Mel Wilson, W2BOC, spoke of his long experience on E-skip and showed slides and lectured on the data he has gathered and analyzed over the past twenty or so years. The talk by Mel was advertised as being much broader than just E-skip, but this was an error since the subject is much too broad for the time that was available.

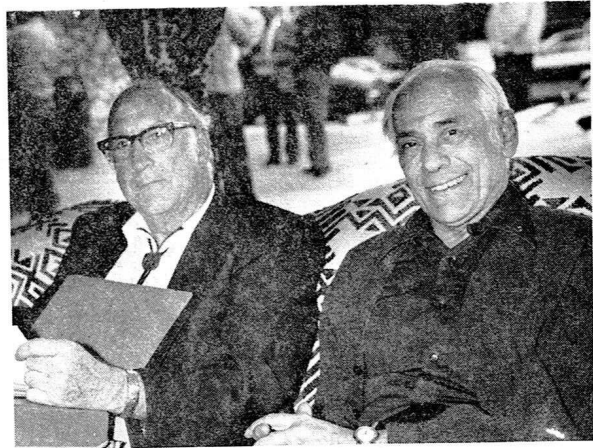
The Mt. Airy Club is very much indebted to these fine gentlemen for the service they have provided to the VHF community in sharing their technical insight with us. Thanks go out to all who participated and all who attended and we look forward to seeing you next year.

* * *

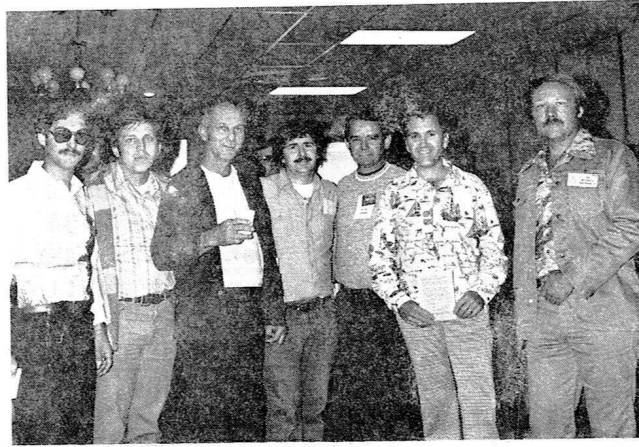
OFFICIAL BULLETIN NR 729 FROM ARRL HEADQUARTERS NEWINGTON CT OCTOBER 19, 1978 TO ALL RADIO AMATEURS BT: During a meeting held Thursday, October 19, 1978, the FCC formally adopted an interpretation of Section 97.79(d) of the Amateur Rules as it applies to autopatch. The Commission declared that autopatch over an automatically controlled repeater is not allowed. Any autopatch must be monitored by a repeater control operator. The FCC also directed its staff to send ARRL a letter indicating this interpretation. Further information will appear in QST. AR



BILL OLSON, W3HQT DEMONSTRATES A 200 WATT
SOLID STATE 432 MHZ AMPLIFIER



JACK POWER, W2AXU AND MEL WILSON, W2BOC.
MEL'S SPORADIC E TALK STOPPED THE SHOW



WB2RBG, WA1CVN, KLZFE, VE1ASJ, WB1OWZ, WB2RLK, VE1/VP9, KP2, ETC., WA3AXV



SHADES OF THE JUNE VHF QSO PARTY

TONY, W3HMU CHEERFULLY ACCEPTS
'THE BROKEN HAMMER AWARD'
FROM DAVE, W3ZD



HAMARAMA 78

MRS. LINDA HAFFT OF OPTOELECTRONICS
PRESENTS THE FREQUENCY COUNTER RAFFLE
PRIZE TO WINNER JESSE WAGNER, K3GKB AS
DOUG, WB3EKES AND CHAIRMAN RON, WA3AXV
LOOK ON

AN OPEN LETTER TO THE PACK RATS

By Wayne Overbeck, N6NB

Ever since the longitude-latitude multiplier system was adopted for the ARRL UHF Contest, we've been hearing suggestions from VHFers that the system should be adopted for all VHF contests! I think it's a proposal the Contest Advisory Committee will eventually be voting on -- of necessity.

Since this would be such a far-reaching change in the way the VHF contests are scored, I think it should receive the widest possible discussion and debate before it reaches a CAC vote -- and I'd sure appreciate some feedback on the matter from the nation's leading VHF contest club!

Basically, the system replaces ARRL sections as multipliers. Each geographic area one degree wide (in longitude) by one degree high (in latitude) would be a multiplier. Each station identifies his one-degree block by the longitude and latitude at the southwestern corner of the block. In other words, you always round downward to whole degrees; even if you're at 75° 59' and 39° 59' you'd give your quadrant as 7539.

This system obviously has some pros and cons that should be considered. It's a very interesting new approach (although it's been used for years in England). Its main advantage is that it makes the multiplier units about the same size all over North America (there still a little smaller in the north than in the south, since the longitude lines get closer together as you move toward the poles).

All of you realize that Eastern Pennsylvania ain't a bad place to operate a VHF contest under the present system, but it wouldn't be a bad spot under the new system either. I've looked over the scores from the first UHF contest, and it's obvious that northeastern stations still have an excellent chance to win. Why? Because you have an awesome concentration of people in many, many different one-degree blocks within VHF range. In the west, many of those blocks are inhabited mainly by sagebrush and jackrabbits, not radio amateurs! Most of the best scores will continue to come from the northeast, I suspect, although a station in a place like Ohio, Illinois, or even Western New York (!!!) might have a better shot at it. (Since California already has 9 ARRL sections, and many of our one-degree blocks are in the desert, I think a W6 has about the same chance under either multiplier system).

The grid block system does have advantages, but there's one big drawback that became very apparent to me during the UHF contest: It's tough to get the needed information from noncompeting stations, few of whom know their longitude and latitude. Imagine trying to ferret out a Midwesterner's grid block (there are about 90 of 'em in Texas alone) with 50 MHz signals fading in and out of the noise level amidst heavy QRM! The only way to do it is to get his QTH--accurately enough to assign the guy to the right quadrant.

Here's a scenario to illustrate the problem:

Contest Operator: "QRZ from N6NB/6, zone 11732, Mt. Pinos, Calif."

Joe Ham: "N6NB/6, this is WBØXYZ, Willie Baker Zero XRay, Yoke, Zebra, etc., etc..."

Contester: "WBØXYZ, you're 59 in 11732, that's 11732, go ahead"

Joe: "Gee, I'm not in the contest, old man. I don't know what all those numbers are. I just thought I'd give you a point, but I guess I can't because I don't have a number like that. My SMIRK number is 5545, if that's any help...etc., etc."

Contester: "WBØXYZ, how about giving me a signal report and your QTH, please"

Joe: "Oh, uh, you're a good solid five by nine here. The handle's Joe, and I'm in Kansas..."

Contester: "Okay, Joe, happy to meet you. But what city are you in??"

Joe: "Oh, I'm about 15 miles west of Kansas City..."

(CONTINUED ON PAGE 10)

AN OPEN LETTER TO THE PACK RATS CONTINUED

Contester: "Could you tell me exactly which town you're in there near Kansas City?"

Joe: "Oh, gee, you've probably never heard of it."

Contester: "For this contest, I've memorized all the towns around a lot of big cities, so I can tell people what their longitude and latitude is. Just pass along the name of your town, please..."

Joe: "Roger, OM. I'm here in Prairie Village, Kansas, and the rig here is... etc., etc."

Contester: "Okay, Joe, your Swan 250 sounds great here (actually he's barely out of my noise level and fading fast, the contester mumbles to himself). But Prairie Village falls right on a latitude line, so could you tell me whether you're north or south of 75th street???"

Joe: "Oh, you really do know Prairie Village. Well, I'm right over by Brush Creek where it crosses Mission Road. Do you know where that is?"

Contester: (in desperation, his voice rising) "please, Joe, before the QRM gets you, tell me whether you're north or south of 75th Street."

Joe: "N6NB, N6Nancy Baker, out in California, this is WBØXYZ, Willie Baker Zero Xray, Yoke Zebra. Well, OM, I'm just a few blocks #@@\$#%&&***#" (at this point, the QRM completely covers WBØXYZ for the last time).

(The Contester clenches his fists, stands up, grabs a hammer, takes aim at his 50 MHz kilowatt and starts swinging, muttering, "I've had it with VHF contests and I won'd need this anymore. CQ World Wide, here I come...")

Obviously, not all QSOs under the longitude-latitude system are like that, because many operators will know what's going on. But, when you get on a band like 50 MHz (or on any band in parts of the country where formal VHF contest activity is very low and you have to dig out your QSOs on FM), this sort of thing is going to happen often.

To be successful, the contest operator will need to know the geography all over America in considerable detail. Some cities, like San Antonio, Texas, will be easy (all on one quadrant), but in others, you'll have to know which streets are the dividing lines and find out where your contacts are in relation to these streets.

So that's the crux of the matter. The longitude-latitude system represents a new challenge for experienced VHFers, and it offers the nearest thing to geographic parity we've ever had in VHF contests, but it does get sticky when you're working a non-competing station.

I'd very much appreciate it if you guys in the Mt. Airy group would discuss the pros and cons of the longitude-latitude multiplier system and share your conclusions with the entire Contest Advisory Committee via your CAC representative, W3HQT!

With 73,

Wayne Overbeck, N6NB (Member- ARRL Contest Advisory Committee)

* * *

MM-WAVES TAPPED FOR COMMUNICATION

Millimeter wave communications, originally developed by the military because they are less susceptible to enemy interception or jamming than earlier systems, now are being considered for commercial application.

Full duplex voice communications has been demonstrated at ranges up to 40 km (25 mi) and half duplex video and 5 megabit/sec data transmission up to 13 km (8 mi) using a 38 GHz frequency. A millimeter wave system has been developed tunable over the entire 38 to 60 GHz spectrum. (from Industrial Reserach/Development - Sept. 1978 via Ric Jansen, K3QQ)

(215) TU7-8052

W3CL

HARRY B. STEIN ASSOCIATES

COMMUNICATIONS CONSULTANTS

HARRY B. STEIN

2087 PARKDALE AVE
GLENSIDE, PA. 19050



AMERICAN RADIO RELAY LEAGUE

HARRY A. McCONAGHY, W3SW/W3EPC
DIRECTOR, ATLANTIC DIVISION

8708 FENWAY DRIVE - POTOMAC
BETHESDA, MARYLAND, 20034

NE 7-8929

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

W3HK

4807 CONVENT LANE
PHILA., PA. 19114



AMIL S. GUMULA
PRESIDENT

A. G. RADIO PARTS CO.
939 TOWNSHIP LINE RD.
ELKINS PARK, PENNA. 19117
TELEPHONE: 215-886-5100

RCA Authorized
Distributor

HOURS
CLOSED MONDAY
TUE. & THUR. 9:30-6:00
WED. & FRI. 11:30-9:00
SAT. 9:30-5:00

(215) 723-1200
(215) MI 6-2511

ELECTRONIC EXCHANGE

ALL TYPES OF HAM GEAR & ELECTRONIC EQUIPMENT
BOUGHT, GOLD, TRADED & REPAIRED

GORDON R. KITTEL
W3GK

136 N. MAIN STREET
BOUDERTON, PA. 19064

AMATEUR & CB RADIO
SALES & SERVICE

(215) OL 9-5900

"HAM" BUERGER INC.
Communication Specialists

BOB HERSHMAN
WA3ZID

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


Suburbs: (215) 449-2300
Phila.: (215) 528-8120

KASS ELECTRONICS DISTRIBUTORS



DISTRIBUTORS OF
RADIO - TELEVISION PRODUCTS
INDUSTRIAL ELECTRONIC PARTS & EQUIPMENT

2502 TOWNSHIP LINE ROAD
(West of Lansdowne Avenue)
DREXEL HILL, PA. 19026



Write for FREE
COPY of any of
our publications.

The Ham Radio Publishing Group
GREENVILLE, NEW HAMPSHIRE 03048

Exit I-95 at Scotch Rd. South
Al & Hank (WB2GWE)



the BARGAIN BROTHERS
PHOTO & ELECTRONIC SURPLUS

CONSTANTLY CHANGING INVENTORY LOWEST PRICES

Glen Roc Shopping Center
216 Scotch Road
Trenton, N.J. 08618

(609) 883-2050

K3KTY

215-567-7130

TRANSPORT EQUIPMENT COMPANY

"EVERYTHING FOR THE TRUCK"

JOHN A. TATE
President

2215 - 2217 Race Street
Philadelphia, Pa. 19103

WA2MWB/7

CARL BARISH

MELCO

P.O. BOX 1673

BELLEVUE, WA 98009

McINTOSH ELECTRIC COMPANY 206-455-5661

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

Day-Nite (215) 455-2121

FERTIK'S ELECTRONICS

Components & Equipment

LEON FERTIK

5400 ELLA STREET
PHILADELPHIA, PA. 19120

RICHARD E. BOKERN

PRODUCT MANAGER
COMMUNICATIONS PRODUCTS OPERATION
FORT WAYNE DIVISION

1913 PRODUCTION ROAD
FORT WAYNE, INDIANA 46808
PHONE: (219) 482-4411

**MAGNAVOX GOVERNMENT AND
INDUSTRIAL ELECTRONICS COMPANY**

WB9PUJ

Budd

W3KKN

ERNEST KENAS
TOOL DESIGN
MANUFACTURING ENGINEERING DEPARTMENT

THE BUDD COMPANY
AUTOMOTIVE DIVISION

PHILADELPHIA, PA.

FREE ESTIMATES
12151 672-3850



MICHAEL McMACKIN
REGISTERED PLUMBING & HEATING

BATHROOM INSTALLATIONS
ELECTRIC DRAIN CLEANING

2405 PARKSIDE AVE.
HATBORO, PA. 19040

People who look for peace get it.

-Guru Maharaj Ji

For information contact:

DIVINE LIGHT MISSION (DUO)
6037 Overbrook Ave.
Phila., Pa. 19131
Office: 215-GR 7-2800

73

magazine
for radio amateurs

PETERBOROUGH, NEW HAMPSHIRE 03458

1 Year = \$15
3 Years = \$36

LANDSCAPING FIELD MOWING
EASTERN PENNSYLVANIA


GROUNDSKEEPING
PHILADELPHIA AND SUBURBS
INSTITUTIONAL - INDUSTRIAL - PRIVATE

PETER H. SHAVNEY, W4SOVH
111 S. EASTON ROAD
GLENSIDE, PA. 19038

886-1859
OR
933-0451

"HAM" BUEBERGER, INC.
 Electronic Equipment Distributor
 "Right in the middle of a lot of good company!"
 68 N. YORK ROAD
 WILLOW GROVE, PA. 19090
 215-659-5900
 Service Since 1966

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



The background of the advertisement is a collage of various electronic and radio-related brand logos, including: Xcelite, Sprague, Telex, Cushcraft, Ten-Tec, TRW, Vibration, Bronco, W2AU, Losen Antennas, ICOM, Saxon, Miller, Asiatic, Rohm, Nite, Gilfer, TPL, Weller, Waldom, Misco, Hustler, Dodge, Ameco, Swain, Amp Special Industries, Bomar, Vector, and many others.

Cheese Bits

2087 Parkdale Ave.
Glenside, Pa. 19038



MEETING NOTICE

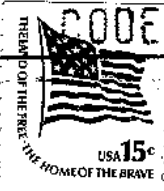
MT. AIRY
VHF
RADIO
CLUB,
INC.

PACK RATS

WAZWAS, STEVE SIMONS
8506 KENDRICK PLACE
PHILA., PA. 19111



ALWAYS USE ZIP



FIRST CLASS