

PACK RATS'



CHEESE BITS

PACK RATS

CLUB CALL: W3CCX

MT. AIRY VHF RADIO CLUB, INC.

SCANNED TO PDF BY BERT, K3IUV, 2012

MT. AIRY VHF RADIO CLUB, INC., PHILADELPHIA, PA. ARNS
50.125, 144.150, 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 XXI

OCTOBER, 1979

NUMBER 10

THE PREZ SEZ

Autumn is here, and along with cooler weather, so is the 1979-80 indoor meeting season at the Southampton Free Library. Those who attended the Sept. 20th Meeting took in a presentation by Hal DePalma, W2WHG/3 of The Thinco Div. of Hull Corp. on pico-miniaturization of passive components. The talk on state of the art component technology brought many interesting questions and comments from the crowd. Next month Jack Power, W2AXU will be doing a presentation on how solar events effect radio propagation on earth. Jack has been "counting sun spots" for many years and this talk should prove very informative - especially with the F2 season coming up.

The biggest event coming up is, of course, the VHF Conference / HAMARAMA on October 6 and 7. Response has been so great this year that just about all of the motel rooms in the area have been booked up. Early registrations are in from all over the Eastern U.S. and Canada. If the weather cooperates we will be overrun with hams - it certainly looks like the best HAMARAMA weekend of all time. So we will need more help than ever before. Even if you can't be there for the whole weekend, come down on Sunday and help sell tickers or park cars for a couple of hours. The HAMARAMA and Conference is how the Pack-Rats show themselves to the rest of the world, so lets make this a weekend we can be proud of. Come on out and help; your Club needs you!

Fall weather is also really nice for doing antenna work! Why wait until January to put up that 300 element array? Do it now so it will be broken in before the VHF SS. With the excellent tropo these past few weeks on the VHF and UHF bands, it might even be nice to get on the air and test out the rig before January!

See you all on the air. My new tower and antennas should be up by the time you read this! Sorry guys, no more band openings!

73, Bill, W3HQT

* * *

ATLANTIC DIVISION DIRECTOR ELECTION

For Director: Jesse Bieberman, W3KT, G.W. "Bud" Hippisley, W2JJ/K2KIR, Harry W. Robinson, W2AZ, Lawrence J. Solarczyk, WA3TSD, Thomas R. Sundstrom, W2XQ, George S. Van Dyke, Jr., W3HK, and Dennis D. Voorhees, AD3O were found lawfully nominated and eligible, and their names ordered listed on ballots to be sent to full Members of the Division.

For Vice Director: Alan H. Komenski, AC2K, Harold C. Smith, K2HC, and Hugh A. Turnbull, W3ABC, were found lawfully nominated and eligible, and their names ordered listed on ballots to be sent to Full Members of the Division.

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: 1979-1980

PRESIDENT: W3HQT, Bill Olson
VICE-PRES: W3IIT, Harry Brown
COR. SECY: WB3HHO, Paul Randolph
REC. SECY: K3IGX, Dick Boyle
TREASURER: K3GAS, Doc Cutler

DIRECTORS:

W3HMU, Tony Souza (Ex-Officio)
N3AHI, Jim Holt (2 years)
WA3NFV, Dan Mitten (2 years)
WA3JUF, Dave Mascaro (1 year)
WA3WAS, Steve Simon (1 year)

* * *

MONDAY NIGHT NETS:

7:30 PM - 144.2 Mhz AM/FM/SSB
8:30 PM - 50.2 Mhz AM/SSB
9:00 PM - 222.98/224.58 Mhz FM
9:15 PM - 1296.3 Mhz CW
9:30 PM - 432.1 Mhz CW/SSB

NET CONTROL

W2EIF
W3CL
K3GAS
W2EIF
K3IUU

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

MAKE A GOOD MARRIAGE GREAT!



ASK US ABOUT OUR WEEKEND.

TONY AND JAN W3HMU DOUG AND WENDY WB3KES
HARRY AND ROSE W3IIT DAN AND LUCY WA3NFV

CALENDAR OF COMING EVENTS
Syllabus by Lee, K3MXM

OCTOBER

Birthstone - Opal
Flower - Calendula or Cosmos

- 1 Yom Kippur
- 4 Russian Sputnik I Satellite launched 1957 - look around what has developed and happened in the last 20 years....
- 6 Mid Atlantic States VHF Conference - Warrington Motor Lodge
Banquet and Hospitality Room
- 6 Personal Computer Music Festival - Phila. Civic Center. Films, Concert, Demos, Displays.
- 6 ARRL - S.E.T. See page 103 September QST
- 7 HAMARAMA - Bucks County Drive In Theater - Warrington, Pa.
Contact Ron and offer your services
- 7 S. Morse files for telegraph patent - 1837
- 11 Board of Directors Meeting - QTH, W3KKN, Ernie Kenas, 2823 Old Welsh Road, Willow Grove, Pa. 19090. 215-659-3485. Directors and interested parties always invited.
- 13 Syracuse, New York Hamfest
- 13-14 ARRL C.D. Parties
- 18 General Club Meeting, Southampton Free Library, Street Road, Southampton, Pa. Guest Speaker, W2AXU, John Power - "Our Sun - Getting To Know It" The Mario Raffle, Frankie's Silent Auction, Refreshments. An open meeting to one and all. Bring your friends!!
- 20-21 Tidewater Hamfest - Computer Fest - ARRL Division. Norfolk Convention Center, Norfolk, Virginia
- 24 United Nations Day
- 28 Statue of Liberty Dedicated by President Cleveland 1886
- 31 Boo - Yep, It's Halloween. . .

* * *

CHANGE OF ADDRESS

W3HQT - S. William Olson
Box 356 R.D. #1
Greenlane, Pa. 18054
215-257-1739

K3BPP - Walter Bohlman
4335 County Line Road
Chalfont, Pa. 18914
215-822-6329

* * *

VOTED TO MEMBERSHIP

WB3CTP - Paul Capone
330 Weymouth Road
Norristown, Pa. 19401
215-275-7179

By Lyn, W3NSI

1. MINI-COUNTER KIT: Opto Electronics has just started advertising on their new K7000 550 Mc counter kit. This unit uses 7 LED readouts and is rated from 5 to 50 Mv sens. up to 550 Mc. It will measure 20 Mv signals at 220 Mc. A TCXO time base is used giving 1.6 PPM between 20° and 40°C. Size of the counter is 1 3/4" h x 4 1/4" w x 5 1/4" d. K7000 can be operated from nicad battery pack or AC adaptor. Price \$80 (kit only) 5821 N.E. 14th Ave. Ft. Lauderdale, Fla. 3333

2. ICOM 6 MT/R: Icom has just introduced their new Ic 551 all mode tr/rec. unit. This unit is very much like the two meter version, the IC 2-11, except that only one panel meter is used on the six meter set. Three memories are provided, and these can be set up to scan three frequencies, stopping at the first active channel. Output is variable from 1-10 watts, for use with SSB converters for other bands. A noise blanker is standard, also a dual VFO unit. While this is listed as an all mode unit, the FM mode appears to be an option. Price \$650 (est.) 3331 Towerwood Dr., Suite 304, Dallas, Texas 75234.

3. TRANSMIT CONVERTER 144 to 220 MC: Hamtronics Inc. has now a kit, the XV2-8, which will take a very low drive (1 Mv) signal on 144-146 Mc; and convert it to 220-222 Mc. with 2 watts PEP output. Unit can be used on any mode, and provides a link to use with a receive converter, for transceive operation. This item could be used with 2 meter units, such as the TS 700 Kenwood, for operation on 220 Mc SSB and CW. Price \$70. 65B Moul Rd., Hilton, N.Y. 14468

* * *

VHF/UHF REPORT

By Jo, W2EIF

The last two weeks of August produced the usual tropo conditions with contacts to Ohio, N. Carolina and Northeast to VE1 land on 2 meters. 6 meters has not yielded very much Es since about July except for reports of Alaska contacts to the NE area.

The contest (Sept. QSO Party) proved to be very exciting. The contest for many during the Saturday hours seemed to be closed in. Contacts to the NE from SNJ were hard to get on all bands. Saturday evening stations in the VA/MDC area were heard working DX to the West and South and the multi-op stations in the NE (on the mountains) were also heard working good DX.

There were good tropo conditions to the South Sunday afternoon with stations in NC coming thru nicely even on 223.5 FM simplex.

Sunday evening produced the DX conditions that everybody had been looking for. Stations from Alabama around to Ill. were available on 2 and 432. This type of contest condition really peeps up the band and produces more activity later on.

The DX opening did not subside with the contest. The bands 2 thru 432 were good to Ohio, Mich. Tenn. N.C., Georgia, Alabama, etc. K4EJQ could be worked on 2, 220 & 432. He was worked by K1FO and K1PXE and others on 220. The opening was good to about noon Thurs. Sept. 13th

There were some peculiar conditions noted during the openings. There were times that stations only a few miles apart could not hear what others were working. As an example, I could hear W2BLV, 5 miles N. of me working stations in Ill. and Indiana on 2 meters and I could not hear a whisper from them. There should be some more good tropo thru Oct. on all bands.

* * *

SPECIAL ANNOUNCEMENT

MONDAY NITE NET TIMES AND FREQUENCIES CHANGED

50.125 Mhz - SSB -	7:30 P.M.	432.110 Mhz - SSB -	9:00 P.M.
144.150 Mhz - SSB -	8:00 P.M.	1296.025 Mhz - CW -	9:30 P.M.
222.98/224.58 Mhz - FM -	8:30 P.M.		

* * *

JULY 18-19, 1979 FROM THE MINUTES OF THE ARRL BOARD OF DIRECTORS

52) On motion of Mr. Gant, seconded by Mr. McConaghy, unanimously VOTED that the Board express its appreciation to the Mt. Airy VHF Radio Club in Phila. (the "Pack Rats") for its initiative in creating a memorial award to honor VHF/UHF pioneer Sam Harris, W1FZJ, as announced in August QST, thereby fulfilling the intent of Minute 91 of the 1979 Annual Meeting. (The Pack-Rat Committee is preparing a beautiful trophy) W3IIT, Chairman.

144 Mhz Solid State Transverter (Part I)
(28 Mhz I.F. 5-8 watts PEP Output)

By Randy Bynum, WB2SZK

After a long unavoidable delay the "Club Project" is finally ready in its prototype stage. The next step is to have a printed circuit board made and to order the parts required.

Described in this article is the receive converter and local oscillator position. Next month I will cover the transmitting mixer. Hopefully, we will be able to get several of these kits built and working (however time is running out) for the January Contest.

Nothing completely original is claimed in this design; however, I have taken what I feel are the best portions of existing designs, some new ideas and combined them into something that is close to state of the art, yet still holding the cost to a reasonable amount. I still have a few ideas I want to try to improve the transverter and if any of them work, I will pass the information along.

Double balanced mixers are used for both receive and transmit. The receive converter has a 40673 RF amplifier ahead of the DRM which results in a reasonable noise figure and good overload characteristics. Another 40673 is used as an IF amplifier at the 28 Mhz output.

The local oscillator uses a 2N3563 oscillator tripler starting with a 38.666667 Mhz crystal. This drives two 2N3563 buffers which have a minimal amount of gain but do offer some isolation between the receive and transmit mixers. (Schematics on page 6).

* * *

WINNERS 10th ANNIVERSARY APOLLO II CONTEST
JULY 21, 22, 1979

CLASS I

- 1st Place, WB8GEW, Adrian, Ohio
- 2nd Place, WB4PFB, Mickey, Fla.
- 3rd Place, WA2HSO, John, No. NJ.
- 4th Place, K4CKS, Squires, Ga.
- 5th Place, WB7VZN, Joe, Ariz.

CLASS II

- 1st Place, WD5FZM, Gene, Texas
- 2nd Place, WB0ZKG, Charlie, Iowa
- 3rd Place, W3LP, Earl & Roy, E. Pa.
- 4th Place, W3CL, Harry, E. Pa.
- 5th Place, W6QNP, Jack, Cal.

CLASS III

- 1st Place, WA9AHZ, Jack, Ill.
- 2nd Place, K3VYG, Gordon, E. Pa.
- 3rd Place, K2JF, John, So. NJ.

CLASS IV

- 1st Place, WB5NDJ, Frank, Texas
- 2nd Place, WB2QOQ, Rick, No. NJ.
- 3rd Place, WD8DRP, Richard, Ohio
- 4th Place, WD9EME, Larry, Ind.
- 5th Place, WB3AIG/9 Robert, Wisc.

CLASS V (XYL)

- 1st Place, WB5KTC, Bonnie, Texas
- 2nd Place, WB2EIB, Mary, So. NJ.
- 3rd Place, WB8WXZ, Frances, Mich.
- 4th Place, WB4PGQ, Anna, Va.
- 5th Place, WD8PKQ, Linda, Ohio

CONGRATULATIONS

To 1st Place Trophy Winners And All
Certificate Runner Ups.

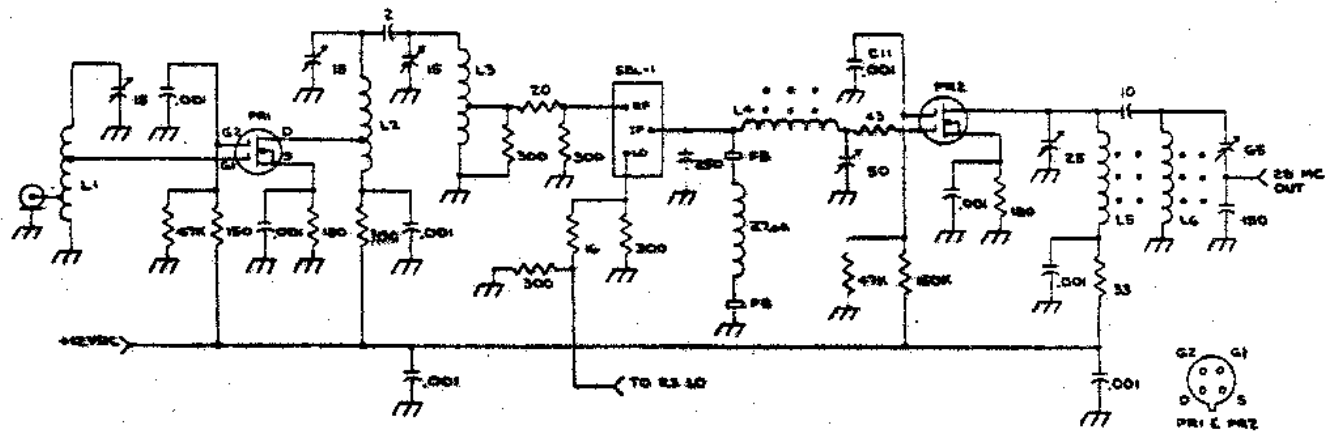
Dr. A.W. (Tony) Slapkowski
VHF SPACE CENTER.

* * *

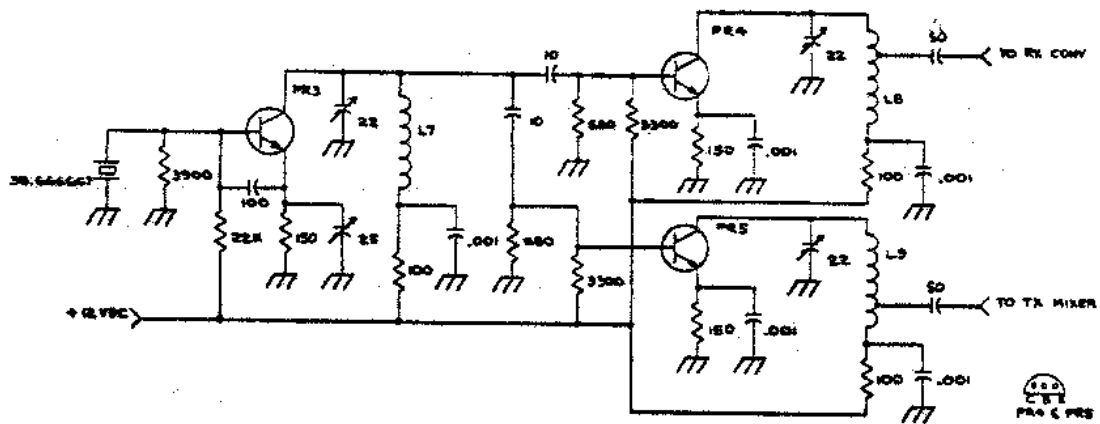
NOTE: The editor was surprised when Rich, K3ACR, (standing in for K4AWS) presented him with a special Space Net Contest Plaque at the September meeting. Thanks Tony.

TONY IS SPONSORING SPACE SHUTTLE CONTEST ON VHF 6PM, DECEMBER 15, 16, 1979, 9PM
More on this item in the November issue of Cheese-Bits.

144 MHZ RECEIVE CONVERTER - 28 MHZ IF



116 MHZ LOCAL OSCILLATOR



COIL TABLE

- | | |
|--|-----------------------------|
| L1 - 4-1/2 turns #18 1/4" ID
G1 tap at 3t and antenna at
1 1/2 turns from ground | L5 - 18 turns #24 on T44-10 |
| L2 - 4 1/2 turns #18 1/4" ID
tap at 3 turns from cold end | L6 - same as L5 |
| L3 - 5 turns #18 1/4" ID
tap at 1 3/4 turn from ground | L7 - 5 turns #18 1/4" ID |
| L4 - 15 turns on T50-6 toroid
#24 enameled wire | L8 - 5 turns #18 1/4" ID |
| | L9 - same as L8 |

SWAP SHOP

FOR SALE: Hammarlund SP-600-JX35, W/spkr, Rack mount. Manual - good cond. \$175 firm. Spare parts (almost complete rcvr) \$50. Pick-up only. Pkg. deal \$200.

CONTACT: WA2QAF after Oct. 5th. 6 PM-10 PM
435 Commonwealth, Trenton, N.J. 08629
Phone: 609-396-4577

FOR SALE: 2 mtr. "Plumbers delight" KW amplifier.

CONTACT: Chip, W1AIM - 8 PM to midnite
Phone: 802-563-2361

FOR SALE: HW-16 xcvr with HB VFO for 40 & 15 mtrs. \$90.

CONTACT: Betsy, KA3BAH after 6 PM
Phone: 215-628-8139

FOR SALE: Old fashioned pine shelving with 3/4 in. hardwood edge. 39" x 12" x 5/8". none warped. \$1.50 per board.

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

FOR SALE: Dentron MLA 2500-B linear - 160-15 M. 2 KW pep - mint \$580. Micro log avr-2, morse, baudot, asc II decoder \$375.

CONTACT: Bill Benner, W3KM
215-224-1489

WANTED: 40 ft. tower

CONTACT: Doug Simpson, WB3KES
Phone: 215-699-8127

FOR SALE: Brand new: KOM IC 215 - \$185. TR7400A \$335. IC 30A for 432 Mhz \$320. includes Larsen mag. mount mobile antenna. Ringo ranger 2 mtr. \$29. Hustler GR144A-\$40
Used: Drake "C" line T4xc, r4c, AC4, MS4, NB, 3 filter 1500, 500, 250 \$1,100.
TS520S - CW Fil - VFO 520 SP-520 - MC-50 \$730. Pride amp. 10 thru 80 great for QRP Rigs requires low driver power \$350.
Antennas: TH3MK3 - 10,15,20 mtr. 3 ele. tribander \$160. TH6DXX, 10, 15, 20 mtr. 6 ele tribander \$209. Many VHF antennas available at super savings - drop \$1.00 in mail for list.
Cushcraft - A-14-2 2 ele. 20 mtr; A-21-3 3 ele. 15 mtr.; A-50-6, 6 ele 6 mtr. \$55 ea.
PHONE: 215-271-8898.

Thurs. & Fri. 6:30 - 10 PM/Sat. 10AM - 6 PM
F & C SALES CO. Surplus Electronics
Test equipment, Scopes, Volt Meters,
Power Supplies, All Type of Electronic
Components, Transistors, Diodes, Tubes,
Wire, And Many Other Specials
906 W. Kings Hwy., Haddon Heights, N.J.
08035

* * *

TID BITS

W3HMU reports that congratulations are in order for KICO the young Harmonic of Sam, N3SM who received his WAS & DXCC. FB!

Hy, WA3NDE reports he will be traveling in Israel from October 25 to Nov. 12. Get in touch with those 4x4 hams OM.

There is a Pack-Rat's collection in the Potter's Museum of Curiosity in Arundel, England. They should get in touch with Lee, K3MXM for his garage collection.

Many thanks to Lynne Whitsel, the XYL of Ron, WA3AXV, on the fine art work for the VHF Conference and Hamarama Programs. Ralph, WA3FOF, our very busy printer, rolled out over 3,000 Programs.

Bert Soltoff, K3IUUV was honored by RCA recently for his work in connection with the Space Shuttle.

Pat, XYL of K3QQ, has been accepted into MENSA, the international organization for persons in the top 2% of the IQ range!

Pack-Rat multi-op W3CCX received the ARRL 1st place Atlantic Division Certificate for the effort in the June QSO Party.

Jack, N3ACV is moving to Massachusetts. Good luck & please keep in touch!

Congratulations to Al Katz, K2UYH on obtaining WAS number 2 for 432 Mhz.

W2AXU reports the Zürich Sunspot number for July 1979 was 159.6 - for August 1979 was 143.5. The smooth number for Dec. 1978 - 116.7 - for January 1979 - 122.8.

* * *

ARRL BULLETIN NR 95 FROM ARRL HEADQUARTERS NEWINGTON CT SEPT. 24, 1979 TO ALL RADIO AMATEURS BT: Amateurs who have written FCC in response to the editorial in October QST are urged to send copies of the letters to the Office of International Telecommunications Policy, Department State, Washington, D.C. 20520 AR.

TWENTY YEARS OF AMATEUR RADIO

C.B. DESOTO

QST OCTOBER 1934

The winter of 1924 and 1925 saw world-wide amateur radio an actual fact. Almost nightly, it seemed, new countries came on the air. Most of the work was in the vicinity of 80 and 100 meters. The Navy Department requested the cooperation of the A.R.R.L. in organizing the Naval Radio Reserve. A group of experimenters continued on the downward trek, achieving daylight DX on 20 meters. The A.R.R.L. arranged eclipse tests in conjunction with the Naval Research Laboratory.

In the April, 1925 issue of QST John Reinartz first propounded the reflecting ionized layer hypothesis to account for the behaviour of short-waves. Fred Schnell, traffic manager of the A.R.R.L. sailed from San Francisco on the U.S.S. Seattle to demonstrate short waves to the Navy. During his seven months cruise he repeatedly outperformed all other means of radio communication with his comparatively low-powered high-frequency equipment, inaugurating the Navys leadership in short-wave development which has been maintained since that time. A few experimenters struggled diligently with 5 meters, but achieved no satisfying results.

The scene is the Faculte des Sciences, Paris in Mid-April, 1925. Delegates from twenty-three nations -- the A.R.R.L. representing the United States -- have convened in the first International Amateur Congress. The constitutional committee presents its recommendations. On April 17, 1925, the International Amateur Radio Union is formed. Maxim is elected president; Warner secretary. Amateur radio officially achieves an international status.

The Antipodes were linked in daylight on 20 meters, as if in celebration of the event, when England worked Australia -- and American amateurs hastened to duplicate the feat. In August the Army Amateur affiliation got under way, with a request for the cooperation of the A.R.R.L. from the Chief Signal Officer. Autumn brought the practical ham use of a new and intriguing development -- crystal control.

And on it went. Amateur radio, guided by powerful national and international organizations, swept on to ever new achievements. Expedition after expedition went into the hinterlands, and the interrupted musical chime of their signals to amateurs in the faraway homeland carried tidings of their derring-do. Storm and flood and hurricane and Acts of God struck down humans and their puny structures, and amateur radio bridged the gap of holocaust to bring intelligence and relief and aid. A hundred and more expeditions, utilizing amateur communication. Two score major emergencies, with amateurs stepping in the breach. Thousands of friendly messages a year, handled gratis for the public. Public service -- freely given, without recompense, unselfishly -- yet withal a source of pure joy to the thousands of giving hams. Payment? Yes, they were paid -- not in money, but in the unsurpassed thrill of achievement and service.

So they flourished, in numbers and in the equal triumphs of technical advance and public service. From 15,000 licensed stations in 1922 to 30,000 in 1932, and again to 45,000 in 1934. From a small group of barely-tolerated experimenters in attic workshops to the most powerful and respected single group in the radio world.

Three decades. The first, birth and infancy. The second, adolescence and recognition. The third, maturity and achievement. No "rags to riches" romance, but a hard life, a perpetual struggle. There were many enemies, jealous and envious and often frankly acquisitive. Even yet, danger dogs the career of amateur radio.

* * *

SILENT KEYS

There will be a memorial service for SSGT Harry F. Brick, USMC - the son of Helen Brick and the departed Frankie Brick (W3SAO) on October 7, 1979 at 1 PM at the Holy Trinity Bethlehem Presbyterian Church, 11th and Rockland Sts., Phila., Pa.

We were also saddened to learn about the recent death of John G. Leitch, who many old timers will remember as the RI in this area. His major career effort was as chief engineer of WCAU (Phila.) until his retirement in 1963. He was a member of the Naval Communication Reserve and served as a Captain during World War II.

Condolences to the family of Herman Lukoff, W3HT (Ex W3HTF) who passed away on September 24, 1979.

COMPARING VHF CONTEST SCORES - EAST AND WEST

By Wayne Overbeck, N6NB

When I went east to operate the September VHF Contest in Vermont, N6VI borrowed the truck-mounted station I had been using on the West Coast, installing his own exciters where mine had been but using my antennas and two of my kilowatt amplifiers.

Marty operated on Frazier Mountain, Calif. (elev. 8500 ft), with a system very similar to what I was using 3000 miles away on Mt. Equinox, VT (elev. 3800 ft). We both had recreational vehicles with built-in electric generators, comfortable operating positions (as portable stations go) and crankup towers. Our antennas were virtually identical, and we're probably about equal as operators. Thus, our scores offer an interesting comparison of what can be done in the northeast as opposed to California. Here's the breakdown:

	50 Mhz	144 Mhz	220 Mhz	432 Mhz	1296 Mhz
	QSOs/sec	QSOs/sec	QSOs/sec	QSOs/sec	QSOs/sec
N6NB/1	193/27	502/31	58/18	78/25	4/4
NBVI/6	54/12	291/11	78/5	26/7	6/3

TOTALS: N6NB/1 - 835 QSOs, 105 multipliers, 102,795 points
N6VI/6 - 464 QSOs, 38 multipliers, 22,382 points

The numbers alone show the decisive advantage one has in the northeast (and explain why I've been traversing the continent to operate there), but there's another point that makes the contrast even more dramatic: there is an enormous difference in the relative importance of FM in the two parts of the country.

Of my 502 QSOs on two meters, only 51, or about 10%, were on 146.52 FM, with another 51 on other FM channels. So 80% of my two-meter QSOs were on SSB or CW.

However, more than 80% of Marty's two-meter QSOs were on FM: 240 out of 291, with 230 of them on 146.52 alone!!! During the whole contest weekend, Marty could only find 51 stations to work on two-meter SSB or CW!

If all use of 146.52 were banned, as has sometimes been urged, the N6NB/1 score would still be 97,440, only a slight decline. But N6VI/6's score would plunge from 22,382 to a mere 13,642 -- nearly a 50% reduction.

And since all of N6VI's 220 Mhz QSOs were on FM, an overall FM ban would cut Marty's score to a paltry 6,650 points, even if he could still find his five 220 Mhz multipliers (and that's not a certainty in view of the minimal activity on 220 SSB-CW in the west).

The bottom line: a ban on the use of FM in VHF contests would have only a slight effect on scores in the northeast, but it would drastically curtail the already limited scoring opportunities in California and probably just about everywhere else except the northeast.

* * *

ITS OCTOBER - ALREADY!

By Jim Holt, N3AHI

That's right, and it means January and the VHF Sweepstakes isn't that far away. To those newer members, our participation in the Club competition for this event is the premier effort under which each and every member is expected to participate. The Packrats have come out on top each and every time for the past 19 years, and as Chairman for this year, I'm gonna, with your help, make it 20!

Therefore, I'll ask each of you to once again, consider your status - is your station equipment in good shape? How about antennas and feedline? If you were planning improvements or adding another VHF-UHF band, do it now, so the bugs can be worked out well before contest time. Its gonna take another all-out effort this year as our competition has already thrown down the challenge and you can bet they haven't been asleep since last year.

I'll have a crew of Band Captains once again this year to help you via the buddy system, where needed. The usual aids and data will be available again. I'm planning for a substantial increase over last years score which will only be possible through all of our combined effort. Get started now - I'm counting on it. 73.

* * *

VISITORS - SEPTEMBER 20, 1979 MEETING

W2WHG/3 - Hal DePalma, Horsham, Pa.

K3KDF, Bud Smyth, Phila., Pa.

K3KOH - Tony Millard, Phila., Pa.

WB3CTP, Paul Capone, Norristown, Pa.

AMATEURS ON CALL

By Pete Shavney, WA3OVH (Associate Advisor,
Post 211, BSA)

About two weeks before the annual Fourth of July parade sponsored annually by the Glenside Patriotic Assn. for the last 75 years, and one of the largest parades in the Delaware Valley, the decision was reached for Explorer Post 211 (a ham radio post sponsored by PENNARC) to enter a float embodying a suitable amateur radio theme. WA3OVH agreed to contribute a tow truck and a 26 foot contractors trailer (subject to availability) for the occasion. Large American flags were used to conceal the commercial signs on the truck, the trailer being unlettered. Originally, a fully operational station with a short tower section and antenna, a tent, and some decorations were planned. However, after setting up most of the float the morning of July 4th, a drenching rain set in and the parade was postponed until Saturday, July 7th. With the experience gained in the first setup, several additional features were added including complete landscaping fore and aft, an imitation wood fire and pot of food being prepared (complete with six year old survivor's son doing the stirring), a second complete station, and an XYL assisting the OM working the amateur base station. The rear station portrayed a wilderness scene with a survivor and his son making camp and attempting to reach civilization via a battery operated CW rig (an HW-7), with his signals being picked up by the station in the front of the float, a complete amateur base station.

The frantic calls for help had to be rephrased as routine CQ calls since we were live on the air, but few spectators would have noticed this. These calls were received by the base station (Swan 350) and the audio amplified through use of a small audio amplifier. AC power was obtained through the use of a hundred watt power inverter running off a fully charged car battery.

Negotiating the local streets, however, proved to be a problem as our ten foot tower section and antenna cleared the Glenside railroad underpass by a scant inch or two, then hit a tree limb on the parade lineup street, breaking a guy line and tent pole. Emergency repairs commenced at once. A substitute tent pole had to be obtained from the shack and other repairs made quickly as parade time was just a few minutes away. Fortunately we were at or near the end of the float section which was itself the final section in the parade which gave us the necessary time to make repairs, after which we carefully avoided low hanging branches and wires.

Playing the role of survivor was Post member Bill Pileggi, KA3AIS and stirring the pot, his little brother six year old Robert dressed in red and blue clothing. Robert must be commended for stirring faithfully for the entire distance of the parade route. At the other end of the trailer separated by an eight foot long tent, a tower section and complete landscaping, was the amateur base station operated by Jim Bracken, Post President and his friend Barbra Ivins playing the role of OM and XYL intercepting the distress signals from the other end of the trailer. Barbra was dressed in commemorative long dress appropriate to the Fourth of July.

Technically, the station operated very well. A power inverter supplied AC necessary for the Swan 350 Base Station, while the HW-7 ran on straight battery power. CW and SSB could be heard from round the world and was plainly audible to the spectators at times when our CW distress message was not being sent. A long wire antenna, though not very conspicuous, provided signals on twenty meters, whereas the very obvious tower section had nothing but an inoperative half of a two meter KLM beam lashed to the top and was strictly for show.

All in all, the entire effort was lots of fun, showed off the emergency aspect of Amateur Radio communications to the general public, yet had lots of challenges to make it fully operational in a limited amount of time. And after it was all over, we were much surprised when we were presented with a second place in floats -- a trophy and a check for fifty dollars.

* * *

NOTICE

Last month there was an announcement of the 4x4 Net meeting on Sunday, October 28, 1979. The guest speaker was to have been Hal Crystal, K2BYB who unfortunately died in an airplane accident recently. Listen on Tuesdays at 9 PM on 146.685 for a new announcement or contact Al, W3AYJ, Jay, WA3IFY, Sam, W3CYH for further information.

215-947-6670

MARKETLINE™

SYSTEMS, INC.

2337 Philmont Avenue
Huntingdon Valley, Pa. 19006

Computers for Hobbyists



AMERICAN RADIO RELAY LEAGUE

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

8708 FENWAY DRIVE - POTOMAC
BETHESDA, MARYLAND, 20034

NE 7-6329

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: 215-886-5100

RCM 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, SOLD, TRADED & REPAIRED

GORDON R. KITTEL
W3GK

136 N. MAIN STREET
SODERTON, PA. 18964

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

Fine Printing For The Radio Amateur
Custom Printed QSL Cards Since 1969

K2RPZ PRINT

stu goodman

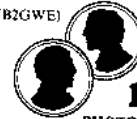
Birth-Wedding & Bar Mitzvah Invitations
Raffle Books-Rubber Stamps-Tickets-Bumper Stickers
Business Cards-Letterheads-Envelopes

P.O. BOX 412
ROCKY POINT N.Y. 11778
15167 744-6260

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

K3MWV

THE KENRICH CORPORATION ELECTRONICS

RICHARD H. PIERCE
VICE PRESIDENT

P. O. BOX 682
LANGHORNE, PA. 19047
(215) 946-4989

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

CAR STEREO - CITIZENS BAND - BURGLAR ALARMS
2 WAY RADIO - TOWER INSTALLATION & REMOVAL
TV - HAM - CB ANTENNAS

Steve Simons

MOBILE EQUIPMENT INSTALLATIONS
SALES & SERVICE

WA3WAS
TEL. (215) RA 5-1135
8508 KENDRICK PL.
PHILA., PA. 19111

215-276-4185

WA3FOF

RALPH ALEXANDER

Electronic Equipment Repair
Technical Writing
Printing

(215) RE 9-8616

City Communication Center

Amateur - Commercial - Marine

BUY SELL TRADE

Sales - Service - Installations

Joe - WB3GEL
Tony - K3UKW

2823 Kensington Avenue
Philadelphia, Pa. 19134

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

-8-

RESIDENTIAL

COMMERCIAL

SHAVNEY LANDSCAPING

DIVISION - SHAVCO, INC.
111 S. EASTON ROAD
GLENSIDE, PA. 19038

PETER H. SHAVNEY, WA3OVH

686-1859

"HAM" BUEGER, INC.
 Electronic Equipment Distributor
 "Right in the middle of a lot of good company!"

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

68 N. YORK ROAD
 WILLOW GROVE, PA 19090
 215-659-5900
 Service Since 1956

Wilson Electronics Corp.

Xcelite

TELEX

SPRAGUE

AMPHENOL

CUSHCROFT

TAB BOOKS

TEN-TEC

TRW

NPG

VIBROPLEX

BRONCO

"W2AU" HAM-KEY

Larsen Antennas

ROHN

ASiATIC

Miller

Saxton

Icom

G.E.

DRAKE

CDE

nte

GILFELT

LMB

TPL

Weller

Waldom

communication specialists

MISCO

BIRD

Vector

HUSTER

phyns

AMCO

SWMAN

COVER CRAFT

AMP SPECIAL INDUSTRIES

TCR

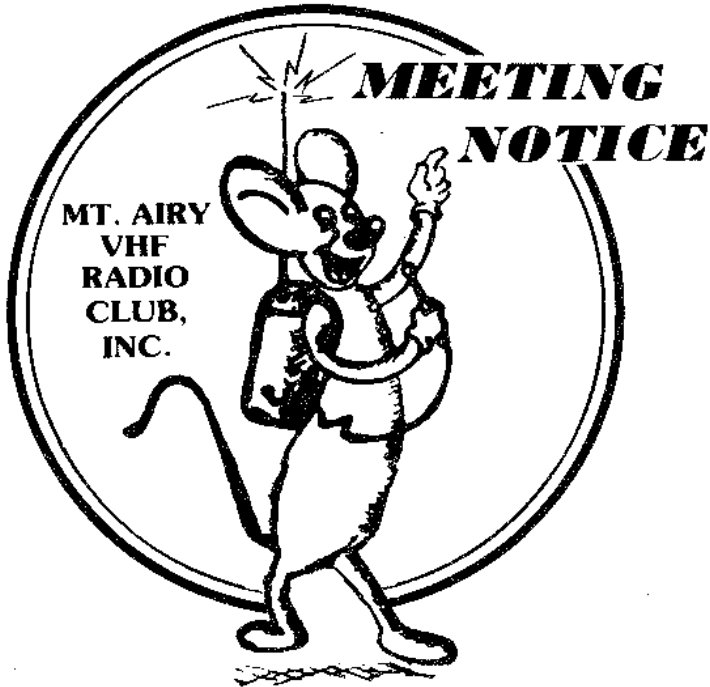
BW

E

Cheese Bits
 2087 Parkdale Ave.
 Glenside, Pa. 19038

PHILADELPHIA, PA
 PM
 SEP 30
 1979

ALWAYS USE ZIP CODE
 THE GREAT SEAL
 USA 15
 HOME OF THE BRAVE



W3WAS, STEVE SIMONS
 8506 KENDRICK PLACE
 PHILA., PA. 19111

PACK RATS

FIRST CLASS