

PACK RATS'



PACK RATS

CLUB CALL: W3CCX

MT. AIRY VHF RADIO CLUB, INC.

CHEESE BITS



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

MARCH, 1980

NUMBER 3

THE PREZ SEZ

The February meeting, our annual Home Brew Nite was well attended and once again proved that home construction is not dead among the Pack-Rats. Congratulations to the winners and better luck next time to the runners up. Those who attended the meeting heard the "Randy Bynum Story". Details are listed elsewhere in this issue. When you read them, please keep in mind that any of us could be in the same boat and lets all support Randy in whatever way we can. This is an extremely important precedent setting case and we cannot afford an unfavorable ruling!

My apologies for passing along false information in the last Prez Sez. Who would have thought there would be more than one D. Evans at the RSGB. Our guest in April will be Dave Evans, G3OUF, General Manager of the RSBG. Of course, it is still going to be a dynamite meeting so hope to see you all there.

Coming up is the June Contest on the 14th and 15th. Chairmen this year will be N3AHI, WA3NFV and myself. Band Captains have been chosen and the first committee meeting will be held early this month. We are out to get back the Number 1 spot this year from W1FC and we can do it if everyone pitches in. We need operators, loggers, set up and take down people, refreshment people, power people, microwave DXpedition volunteers, stake pounders, flash light holders, etc., etc. There is a place for YOU this year. Lets start now and win in June!!

We are all sorry to learn of the passing of another club member. Jim Perkins, W3SMK was a loyal Pack Rat to the end and was loved and admired by all his fellow Rats. We all send our warmest sympathies to Jim's family and the families of the other members who passed away recently, Herm, K3GOZ and Doc, W3CLT. Lets all try to stay healthy for a while. We have been hoping to increase the club membership, not decrease it!!

Speaking of membership, do you know of any good VHFer's out there? Why not invite them to a meeting. We're just like the Marines. We need a few good men or should I say, a few more good men. See you all in March.

73, Bill, W3HQT

IN MEMORIAM

JAMES G.B. PERKINS, JR., W3SMK
APRIL 17, 1916 - FEBRUARY 24, 1980
A GOOD MAN BLESSED IN HEAVEN

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

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SWAP SHOP ITEMS - no charge.

DEADLINE FOR ARTICLES IS THE GENERAL MEMBERSHIP MEETING.

EDITOR:

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Glenside, Pa. 19038
215 - 887-5052

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Elkins Park, Pa. 19117
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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)
N3AHL, 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
K3IUW

PACK RAT REPEATER - WR3ACD - 222.98/224.58
Churchville, Pa.

1-302-478-2757

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K3WAJ

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MAKE A GOOD MARRIAGE GREAT!



ASK US ABOUT OUR WEEKEND.

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

CALENDAR OF COMING EVENTS

Syllabus by Lee, K3MXM

- RCH Enjoying this nice weather - well - according to two different Farmers Almanacs, we are still due for one good heavy snow storm.
- 1 ARRL - DX Contest - Phone - see December QST, Page 94
- 2 Delaware Valley Amateur Radio Society Hamfest - Christiana, Delaware
- 2 Feast of Lots - Purim. For you home gardeners now is the time to get started on your indoor flats of vegetables and flowers...
- 12 WIAW - Qualifying Run 10-35 wpm. Test your CW skills. See February QST for full details.
- 13 Board of Directors Meeting - QTH, W3KKN, Ernie Kenas, 2823 Old Welsh Road, Willow Grove, Pa. If lost 659-3485. Directors and interested persons always welcome.
- 15 Philadelphia Area Computer Society (PACS) Computer Game Festival, LaSalle College Ballroom, 20th and Olney Aves., Phila., Pa. 10:30 AM till 5:00 PM. FREE ADMISSION. A real fun day, bring the wife and kids. The couple hours will be well spent and most enjoyable.
- 17 St. Patrick Day - everyone is Irish this day!
- 18 Gold discovered in California in 1848, Wonder what it was worth an ounce then!!
- 20 General Club Meeting - Southampton Free Library - Street Road, Southampton, Pa. The Mario Raffle, Frankie's Silent Auction, Free Refreshments. Bring your friends and buddies - always a pleasant and entertaining evening. Speaker will be WB2CPA, Gerald Pulice of Staten Island, NY. A video tape demo of European TV DX recorded during the recent past openings.
- 21 It's Official - Spring is here!!
- 29-30 CQ WPX Contest - Phone
- 29-30 RAMAPO MT. SPRING VHF QSO PARTY - See VHF/UHF Report on page 5.
- 30 Purchase of Alaska - 1867
- 30 Calvert Hall Hamfest - New location: Maryland State Fairgrounds at Timonium, Md. Off I-83, 2 miles North of I-695. Info: Joseph A. Loche, Jr. 2136 Pine Valley Dr., Timonium, Md. 21093. For a phone recorded message, dial: 1-301-HAM TALK
- 30 Palm Sunday.

IMPORTANT DATES

APRIL 24th - ARRL Nite

APRIL 26th - LADIES Nite - Warrington Motor Lodge

UPCOMING EVENTS

April 13 - ARRL EME Contest - Part I

April 13 - Penn Wireless Hamfest - National Guard Armory, Roosevelt Blvd., Phila., Pa.

April 19-20 - Trenton Computer Festival

April 25-27 - Dayton Hamfest

June 14-15 - ARRL VHF Contest. The Pack Rats will be at Hilltown!!

* * *

NOTICE

Doc, K3GAS, is chairman of registration for the Liberty Dental Conference to be held March 9,10,11,12 at the Sheraton Hotel, 17th & J.F. Kennedy Blvd., Phila. Anyone in the area, stop up and see Doc in the registration area.

NEW PRODUCTS OF INTEREST TO HAMS

By Lyn, W3NSI

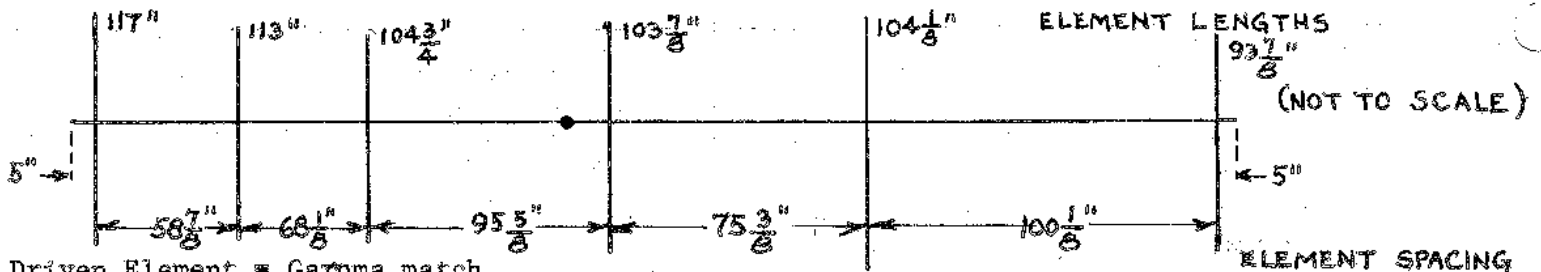
1. TEDCO 80 METER T/R: The model #1 80 meter t/r unit is designed for use by novice hams, covers the range 3685 to 3755 Khz. Power input is rated at 1 watt, and operation on 9 "D" cells should allow a weeks worth of portable activity. The circuit uses 9 transistors and one IC. Receiver is of the direct conversion type and sensitivity is rated at 1 MV for 10 DB. Size is 9"x5"x8". (9 drycells take up some room!!) Price \$80. 9 Canonicus Ave., Newport, R.I. 02840

2. SCANNER FOR 8 TRACKS: Hams with 8 track players in their cars may be interested in a plug-in scanner unit that covers the VHF Hi and Lo bands. Doubtless, a ham could adjust the RF stages a bit and use the unit on both 6 and 2 meters for FM Repeater reception. In use, the unit is slid into the 8 track slot. Four crystal controlled channels are available. A squelch is part of the unit, with volume being controlled by the control on the player. A neat trick. Price \$100. Bearcat Electra Co., 300 E. County Line Rd., Cumberland, Ind. 46229

3. MINI COUNTER: It seems that each issue of a new ham magazine that arrives has another counter listed in the ads. Considering the fact that any ham could use at least one of these gems, this is not surprising. This new #5500 Mini DSI unit is hard to beat for normal ham use. It is small enough to fit in anywhere in the building or operating area. With a battery pack, it can be used out in the car or backyard for tests. The sensitivity of 10-50 MV makes it possible to get readings from a handy-talkee across the room. Accuracy is rated at 1 PPM from 17-40 C. Size is 5 x 5 1/2 x 1 1/2 inches. Display is 8 LED on this factory assembled unit. Price \$100. DSI Instruments, 9550 Chesapeake Dr., San Diego, California 92123.

* * *

NEW CUSHCRAFT 6 METER BOOMER: 1/2 power beam width - 36-38°. Front to back ratio = 22 db (nominal). Forward Gain (real measured) 12 dbd. Gain bandwidth - Very narrow ≈ 500 KC. ie. 1:1 at 50.1 1.6:1 at 50.5 2+:1 at 50.8



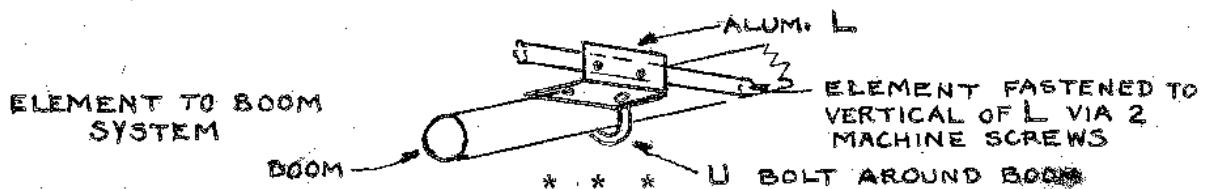
Driven Element = Gamma match

Boom = 7 segment sleeved and tapers from 2" diameter at center to 1 1/2" diameter at both ends.

Elements = 3 segment sleeved tapers from 5/8" diameter at center to 1/2" at both ends.

Well built but a real monster

Sleeving = All sleeving is via 90° cross cuts and S.S. hose clamps



ARRL BULLETIN NR 18 FROM ARRL HEADQUARTERS NEWINGTON CT FEBRUARY 13, 1980 TO ALL RADIO AMATEURS
 BT: The new FCC rules permitting the use of ASCII teleprinter code, as described in ARRL Bulletin number 12, go into effect March 17, 1980 AR.

* * *

DEAR MEMBERS OF VHF RADIO CLUB: We wish to thank you all very much at our time of sorrow for your thoughtfulness. Betty Klein and Family of K3GOZ, Herman Klein.

* * *

VOTED TO MEMBERSHIP, 2/21/80 MEETING
 WB3IND, George McMahon - XYL, Dolores
 312 W. Rosemar St., Phila., Pa. 19120
 215-LI 9-6916

APPLICATION FOR REINSTATEMENT TO MEMBERSHIP
 K3GFF, George R. Korn
 3807 Amherst Pl., Phila., Pa. 19136
 215- DE 8-4260

VHF/UHF REPORT

By Jo, W2EIF

The VHF bands have not shown any activity of the excitement provoking type. There were some flairs on Jan. 25th with 5 sids, and another flair on the 27th. The 28th produced an aurora on both 6 and 2 meters with midwest and eastern states coming thru, mostly on CW.

Activity on 2 meters usually centers around 144.130 Mhz with stations over about 250-300 mile radius participating. 432 activity seems to be continuing on Wed. nites; 8:00 to about 10 P.M. Feb. 20th produced good signals on 2 and 220 and 432 along the east coast. There was a duct-type opening between the Norfolk area and the Cleveland area on 2 meters, however, nothing was noted on 432.

Don't forget the SPRING VHF QSO PARTY sponsored by the Ramapo Mtn., Amateur Radio Club of N.N.J. The rules will be the same as the ARRL QSO Party Contests. The contest starts March 29 at 1800 Z and runs until March 31 at 0400 Z. ARRL forms may be used. Note that the operation is SSB-CW only. No FM to be used except 450 Mhz.

The deadline for log submission is April 28th and logs, summary sheets, check logs and comments are to be mailed to: RAMAPO MOUNTAIN AMATEUR RADIO CLUB, P.O. Box 364, Oakland, New Jersey 07436.

* * *

VISITORS-MEETING FEBRUARY 21, 1980

WB3IHY - Joe Garber, Phila., Pa.	WB3IND - George McMahon, Phila., Pa.
WB3JYO - Paul Drexler, Wycombe, Pa.	K3GFF - George Korn, Phila., Pa.
WB3FEH - Bob Rhoads, Churchville, Pa.	KA3ANH, Bill Nase, Lansdale, Pa.
WB3EFO - Ed Lee, Huntingdon Valley, Pa.	Rich Chism, Southampton, Pa.

* * *

ANNOUNCEMENT

The Philadelphia Amateur Radio Club operates an open 20 watt repeater 145.390 Mhz from the Einstein Hospital, Southern Division at 5th and Reed Sts., in S. Phila. They conduct swap net on Sunday evenings at 9:30 PM which runs for 30 minutes with KA3BLP as net control. All are welcome to participate. Thanks - Tony K3UKW and Gus, K3GYS.

* * *

ARRL BULLETIN NR 12 FROM ARRL HEADQUARTERS NEWINGTON CT JANUARY 31, 1980 TO ALL RADIO AMATEURS
BT: The FCC has amended Part 97.69 of the amateur regulations, thereby granting permission for the use of ASCII in the Amateur Service. The regulations state that the code shall conform to the American Standard Code for Information Interchange as defined in the American National Standards Institute (ANSI) Standard X3.4/1968, F1 emission shall be utilized on those frequencies between 3.5 and 21.25 MHz where its use is permissible and the sending speed shall not exceed 300 bauds, F1 F2 and A2 emissions may be utilized on those frequencies between 28 and 225 MHz where their use is permissible and the sending speed shall not exceed 1200 bauds, F1 F2 and A2 emissions may be utilized on those frequencies above 420 MHz where their use is permissible and the sending speed shall not exceed 19.6 kilobauds. The effective date for this amended section will be approximately thirty days after publication in the Federal Register AR.

* * *

LEE'S FUNNIES

A fellow who doesn't like the Post Office directive about ZIP Codes writes his in Roman Numerals. Let's see, would ours be XXI I XVII.....

Did it ever occur to you that if it wasn't for Thomas Edison, we would all be watching television by candlelight....

If someone offers you the world on a silver platter, take the platter...

Right in the middle of a speech at the last QCWA meeting, the lights went out. "Everyone raise his hands" shouted the speaker. All did, and to their amazement, the lights came on. "It's simple," explained the speaker. "There's an old saying, many hands make light work."

If you really want to annoy your doctor, next time he says "strip to the waist" - take off your pants....

Got troubles - face it like a man - blame it on your wife....

HOME BREW NITE CONTEST

(Pictures on Page 8)

The following is a list of participants and a brief description of their project/s:

K3GAS - Nuke alarm for automatic mud slinger to cover an atomic plant.
WA3WAS - 220 MHz transverter - 220 MHz amp. control.
WB2SZK - Solid state 50 & 144 MHz units.
K3IUUV - 144/220 transverter - 220/144 pre-amp. Electronic dice game.
W3HQT - Pre-amp 8877 PA/220 MHz.
WB3CDE - GN/RIW amp's. 6-2-432 - X 250's amps.
WA3JUF - 2304 MHz converter.
WA3AXV - 6 meter SS amp. - 432 Amp.
WB3IHY - Stand-by power supply.
N3EG - IC Audio amp - IC audio Osc.
W3CXU - 1296 MHz pre-amp/filter/mixer.
K3MXM - 50 MHz amp. SS.
W3HMU - Calorimeter calibrator for surplus power meters (dummy load)
N3MW - 220 MHz receiver & transmitter amp. Zeus conversion.

The Judges (K3MWV, WA3NFV, WA3NUF, W3ZD) declared the following winners:

<u>Most Ambitious</u>	<u>Most Unique</u>	<u>Best Construction</u>	<u>Best Design</u>	<u>Most Outstanding Failure</u>
WB3CDE	WA3JUF	WA3WAS	W3CXU	N3MW
K3IUUV	W3HMU	WA3AXV	W3HQT	K3GAS

* * *

TID BITS

75 logs were submitted for the January VHF SS with a total score of 1,345,722 points. Ron, WA3AXV is again "King" with a score of 77,064.

The June VHF QSO Party Contest Committee; N3AHI, W3HQT and WA3NFV. If you are interested in operating at Hilltown, get in touch with any of these gents.

Correction to the announced speaker and guest for our ARRL Nite on April 24, 1980. The ARRL Headquarters man remains K1ZZ, David Sumner. Joining him, however, will be G3OUF, Dave Evans of RSGB Fame.

Congratulations to Bob Schmilewske, K3KUD, Editor of the Blurb (Philmont Mobile Radio Club) for receiving the outstanding award in the Amateur RadioNews service (ARNS) publication contest.

Application information for the SPESM Award as follows: WA9FEF, Ted Jordan, 572 East State Street, South Elgin, Il. 60177

WB3ATA/7, Brian Mullen on duty with the Navy in Washington State writes that he misses the Pack-Rats and especially the Contest. Says "hello" to all. Hopes to make a flight East one of these days.

W2AXU, Jack Power reports the monthly mean number for January, 1980 is 162.2. He received the May 1979 smoothed number the other day which is 147.4 --

* * *

ARRL BULLETIN NR 5 FROM ARRL HEADQUARTERS NEWINGTON CT JANUARY 21, 1980 TO ALL RADIO AMATEURS BT: FCC Gettysburg reports that because of a programming error in early January, a number of Amateur licenses were issued with expiration dates five days after issuance. Holders of such licenses need not communicate with FCC. They may continue operating, and, as soon as possible, will receive superseding licenses through the mail AR.

ARRL BULLETIN NR 6 FROM ARRL HEADQUARTERS NEWINGTON CT JANUARY 21, 1980 TO ALL RADIO AMATEURS BT: A reciprocal operating agreement between the United States and Spain became effective on December 21, 1979. U.S. amateurs seeking operating permission in Spain should contact the Union de Radioaficionados Espanoles, P.O. Box 220, Madrid 4, Spain, for information on application procedures AR.

* * *

TWO METER NETS

The East Coast Single Sideband Rag Chewers Net issues a handsome certificate. They meet da at 9 pm on 144.3. Call in for two or more times and the wallpaper is yours. NCS is KA2AYQ in North Bergen. This is a lively group.

The East Coast SS Group meets each Sunday at 10 am on 144.25. NCS is WA2SLY in Bayside, NY Another net on Tuesday nights at 9 pm is the Ramapo Mt. Club in Oakland, NJ on 144.25. NCS is KA2AVA. Tnx W3KKN

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FOR SALE: Icom IC-230 synthesized 10 watt 2 meter FM transceiver. Complete w/ 15 Khz splits. Works great and includes manual. 13.8 VDC @3A regulated power supply also available. \$190. Kenwood Twins. T-599D and R-599D. Both are only one year old and transmitter was hardly used. Like brand new with original cartons and all manuals (operating & service). R-599D has xtal filter for NB FM and 500 Hz CW filter. T-599D will also xmit FM. \$599. Regency Model WT-4 shortwave receiver. Covers 55 Khz to 30 Mhz. In working condition. \$15.00 Tower Tuner for 80 and 40 mtrs. For any tower at any height. \$75.00

CONTACT: Richard H. Pierce, K3MWV
2700 New Falls Road
Newportville, Pa.

Phone: 215-785-0085

FOR SALE: 144-10T Chuscraft "new" 2 mtr. 10 element twist \$25. Swan 3 element 10-15-20 Mtr. beam \$75. or best offer. MEJ super tuner, \$25. Dentron S-2 80 thru 2 mtrs. SWR/pwr meter \$25. Astatic D10A mike - (Used 4 times) \$40. Icom 215 - 2 mtr. xcvr/ht (FM) - Nicads & charger \$190. Icom-211 all mode 2 mtr. xcvr \$480. Mirage B108 all mode 2M 80 watt amp/preamp \$135. (211 and B108 package price \$580) Ten Tec Omni A series B with matching P/S, digital readout/freq. counter, keyer & microphone (less than 1 yr. old) will sell as package only \$1150.

CONTACT: WA2ADS, Alex Calabrese
123 Catherine Ave.
Buena, N.J. 08310

Phone: 609-697-3566

FOR SALE: Sanyo - 9 band shortwave rcvr (portable) still in sealed carton-never used cost \$350. Sacrifice \$275. Wilson Mark IV - HT 2 mtrs. 4 watts, touch-tone 6 xtals - charger, mint, sacrifice \$250.

CONTACT: Hy Ecksel, WA3NDE

Phone: 215-677-7986

FOR SALE: Lafayette BCR-101 rcvr. solid state (current production, like new) 0.17-0.4 & 0.53-30 Mhz. (\$299 at Lafayette) Asking \$200.

CONTACT: Charley Craft, N3MW

Phone: 215-855-5704 after 5 P.M.

FOR SALE: Collins 32S3 transmitter, round emblem (39K serial #) mint shape \$675; 516F2 power supply for above. \$125; DX engineering RF processor for above. \$50. Collins 75A4 receiver, \$3943 serial #) w/ 6.1 and 3.1 Kc. mechanical filters, mint condition \$325; with 500 cycle CW filter, \$375. Info-Tech Rtty and Morse system - M200E converter, M300 Keyboard, Sanyo 4209 video monitor, new in April 79 (see write-up in Feb. 80 73 Magazine, package \$775.) E.F. Johnson AM and SSB 10 meter transceiver, professional conversion by certified communications, tynes 28.5 to 29.0 MHz continuous, with magnetic mount mobile whip \$160. Icom IC-280 synthesized 2 meter transceiver, new June 79, mint condition \$280.

CONTACT: Ed Vickner, K2SNK
21 Running Brook Road
Trenton, N.J. 08638

Phone: 609-883-5318

FOR SALE: Comcraft synthesized 2 mtr/220 Mhz FM w/2 -VFO's; 25W. \$375.

CONTACT: Dan, N2ASC

Phone: 609-386-1540; Daytime at work -
BA 3-7207 (Ext.223)

FOR SALE: Swan TV-2 2 mtr. transverter used w/Swan 250, manual; needs 5894 final tube, \$100. TR22C w/10W. Drake Amp. with 5/8 whip (xtalled up for Buffalo, N.Y. area) \$250.

CONTACT: Charley Gianetta, WA3RSQ
5485 Colony Drive
Bethlehem, Pa. 18017

FOR SALE: 432 solid state rec. converter (28 Mhz 1F) \$20. 220 nuvistor converter w/ps. (28 Mhz 1F) \$10.

CONTACT: Randy Bynum, WB2SZK
15 Breckinridge Drive
Berlin, N.J. 08009

Phone: 609-567-1723

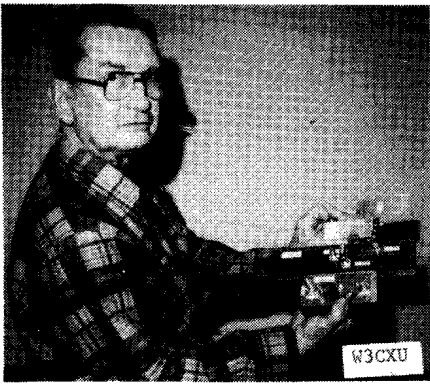
FOR SALE: 2 - 8 ft. Dia. solid aluminum dishes - no feed.

CONTACT: Glenn Kurzennabe, K3SWZ
403 Centerview Ave.,
New Cumberland, Pa. 17070

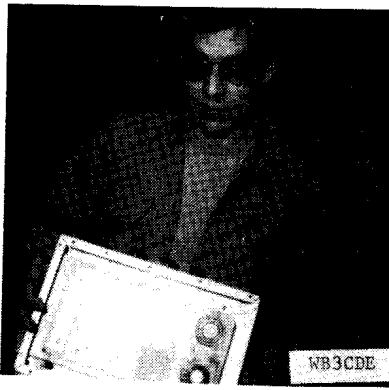
Phone: 717-766-0223 - Work
717-938-3655 - Home

WANTED: 813 Type Tube

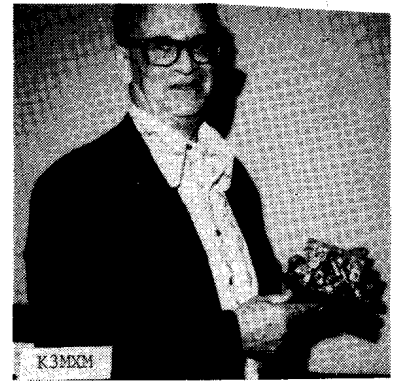
CONTACT: Ed Barbacow, K3ZCY, R.D. 1,
Box 92A, Graysville, Pa. 15337



W3CKU



WB3CDE



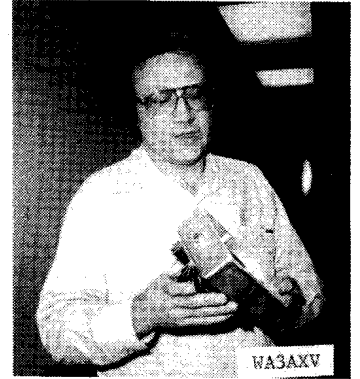
K3MCM



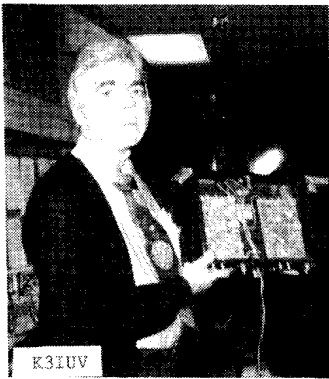
WB3IHY



WA3WAS



WA3AXV



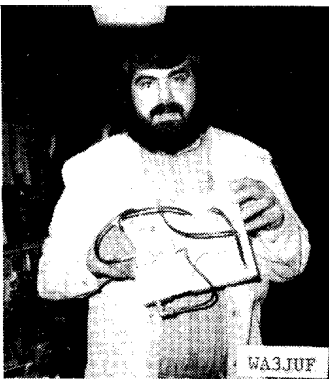
K3IUV



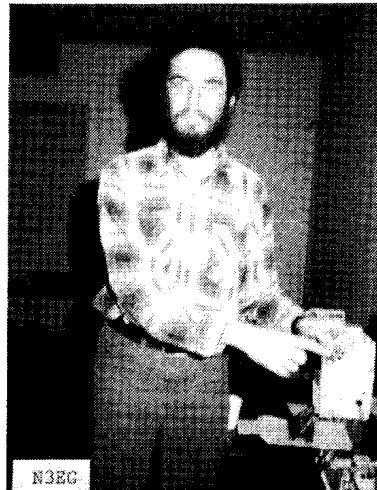
K3GAS



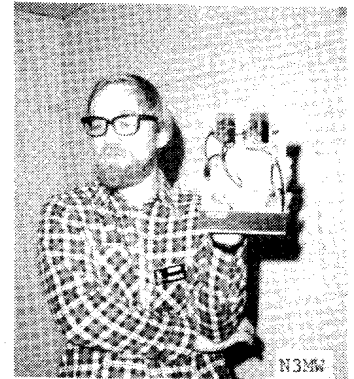
W3HMU



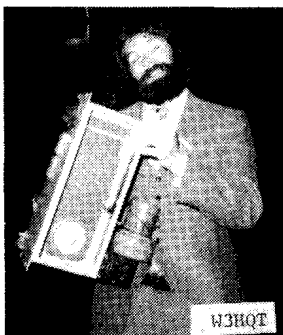
WA3JUF



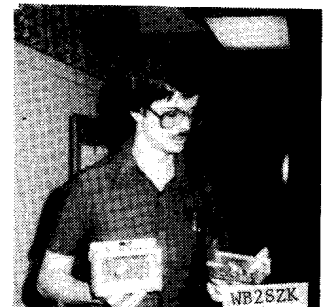
N3EG



N3MW



W3HOT



WB2SZK

HOME BREW

Photos by K3MWV

THE RANDY BYNUM STORY

In May 1979 Randy Bynum, WB2SZK received a phone call from a neighbor across the way complaining of TVI/RFI problems. Bynum investigated the problem and found that his 50 Mhz transmissions were interfering with his neighbors three TV sets, an electronic organ, three stereos, and a home intercom system.

Installation of 300 ohm stubs cured the TVI problem but external application of filter devices on the other appliances proved to be only partially effective short of internal modifications. Bynum gave the neighbor a list of manufacturers to contact and tried to explain the phenomena of audio rectification. Later complaint calls prompted him to advise the party that there was little more that he could do.

In November he received a summons from the township to appear in court for violating a local nuisance ordinance. At the hearing the complaining neighbor testified under oath about the interference and that Bynum was "a terrible person". Bynum was quitted by the judge (was not sworn in or allowed to testify) if he had a license. Finding that he did, he asked Bynum to stay off the air for 30 days pending an FCC investigation which Bynum refused to do. He then was found guilty and fined \$250 and \$25 court costs. After this event, Bynum contacted an attorney and started to accumulate pertinent background information from the ARRL, the PCL and Senator Goldwater's staff among others.

In early December, the FCC out of the Phila. office made an investigation after the complaining neighbor refused to deal with the SJRA TVI Committee. The neighbor had circulated a petition and obtained signatures from other neighbors, some who had never even contacted Bynum. Later investigation proved that a number did not receive interference at all. The original complainant had meanwhile hired a TV repairman who apparently removed the stubs that Bynum had installed and added a booster amplifier to the TV sets! All other filter devices on the other appliances were also removed. The result...the interference was even worse. Booster amplifiers were also installed on other neighbors sets. The FCC, as a result of their investigative efforts, gave WB2SZK a clean bill of health and advised the neighbors and suggested remedies.

In the middle of January, the township Police Chief made contact with Bynum and held a 3 hour conference at Bynums home. It is interesting to note, the complaining neighbor made two calls to the police station during this time about receiving TVI when Bynum wasn't even on the air. A plan suggested by the Police Chief to contact the complaining neighbors on the petition was agreed to by Bynum and was implemented a number of times when tests were made in the presence of the Chief. The complainants dwindled town to four after this effort.

The township on December 19, 1979 adopted the following ordinance:

SECTION I. That Chapter 50, Peace and Good Order of the Code of the Township of Winslow be and the same is hereby amended to include the following sections:

Section 50-10.2. Interference by Radio Transmitter. It shall be unlawful for any person to transmit, continue or cause to be transmitted or continued any radio emission, signal, or transmission which either causes or creates electrical, visual or audible interference, or, by said transmission annoys, disturbs or endangers the comfort, repose, health, peace, safety or general well being of others within the limits of the Township. Examples of violations of this Ordinance, though not limited to the below, would be radio emissions, signals and transmission interference as follows: 1) The transmission of radio signals and/or emissions causing any interference upon the visual and/or auditory operation of television in such a manner as to disturb the peace, quiet and comfort of the neighboring inhabitants; 2) The transmission of radio signals and/or emissions causing any interference upon the visual and/or auditory operation of receiving sets, musical instruments, phonographs or other machine or device designed for the production or reproduction of sound in such a manner as to disturb the peace, quiet and comfort of the neighboring inhabitants.

SECTION II. Severability. Should any section, part or provision of this Ordinance be held unconstitutional or invalid, it shall not affect the validity of this Ordinance as a whole or any part thereof other than the part so held unconstitutional or invalid.

SECTION III. When Effective. This Ordinance shall take effect immediately upon public hearing and final passage in accordance with law.

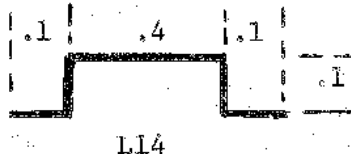
(CONTINUED ON PAGE 10)

220 MODIFICATION TO PACK RAT 144 MHZ TRANSVERTER
BY BERT SOLTOFF, K310V

The October and November 1979 Cheese-Bits included articles by Randy, WB2SZK on the C1 Project 2 meter transverters. Later the writer was prompted to investigate the possibility of modifications to the units for operation on the low end of 220 MHz (Nov. 27, 1979).

The mods consist mainly in changing the tuning circuits and the substitution of some components.

- L1 3T #18 - 1/4" ID, GI tap 2 1/4, Ant tap 1 1/4
- L2 3T #18 - 1/4" ID, tap 1 3/4
- L3 3T #18 - 1/4" ID, tap 1 3/4
- L4,L5,L6 same as 2 meters
- L7 4T #18 - 1/4" ID
- L8 3T #18 - 1/4" ID, tap 1 1/4
- L9 Same as L8
- L12 2T #16 - 1/4" ID
- L13 2T #16 - 1/4" ID, tap 1
- L14 Copper strap, 1/4" wide, 0.8" long
- L15 2T #16, - 1/4" ID
- Q4 Collector choke 4T #16, 3/16" ID



Note: All taps are from GRD, or bypass end
Crystal - 48 MHZ - Tune oscillator collector to 96 MHZ - Tune L.O. buffers as doublers to 192 Alternate - Use 64 MHZ xtal tune collector to 3rd harm (192) then buffers stay as buffers. All other values same as 2 meters.

Suggestion: Better bypasses on Q3 and Q4 emitters will boost output (not as important on 2 meters) I used 500 pf "RADAR" feed thru.

Power out @ 220 \approx 1 watt CW.

* * *

THE RANDY BYNUM STORY
CONTINUED

Bynum was summoned under this new ordinance and the original nuisance ordinance to appear for a hearing on Feb. 13, 1980. He appraised the FCC of this new turn of events and obtained for them copies of the legislation. The FCC then sent a reissue of a 1977 Public Notice citing the Federal Preemption to the township officials. Attempts by Bynums attorney to make contact with the township Mayor to try for a cancellation of the legislation was to no avail. The attorney had no other alternative but to obtain an interum injunction from the State of New Jersey Superior Court. A hearing is scheduled for March 28, 1980.

The legal fee for these proceedings is \$1,000.00 provided the case does not become more complicated. The Mt. Airy VHF Radio Club, Inc. Board of Directors ordered a check to be sent to Bynum for \$500.00 for a down payment and also authorized the formation of A Randy Bynum Defense Fund. Randy is a member of this Club. Contributions may be made to:

Harry B. Stein, W3CL (Make a notation on the check--The Randy Bynum Defense Fund) Mail to: 2087 Parkdale Avenue, Glenside, Pa. 19038

This case will apparently be the first of this kind in the state of New Jersey and will, therefore, set a precedent. Lets hope it turns out for the better. We will keep you advised.

* * *

ARRL BULLETIN NR 23 FROM ARRL HEADQUARTERS NEWINGTON CT FEBRUARY 25, 1980 TO ALL RADIO AMATEURS BT: The official station of the Winter Olympics Radio Amateur Network, W0RAN, will continue to be available for contacts through March 9. Frequencies and times are 14280 kHz from 1500Z to 1630Z, 28888 kHz from 1800Z to 1930Z and 21400 kHz from 1930Z until the band closes. QSLs go to K2DFS, RFD 1, Route 192, Saranac Lake, NY 12983. Please include an sase AR

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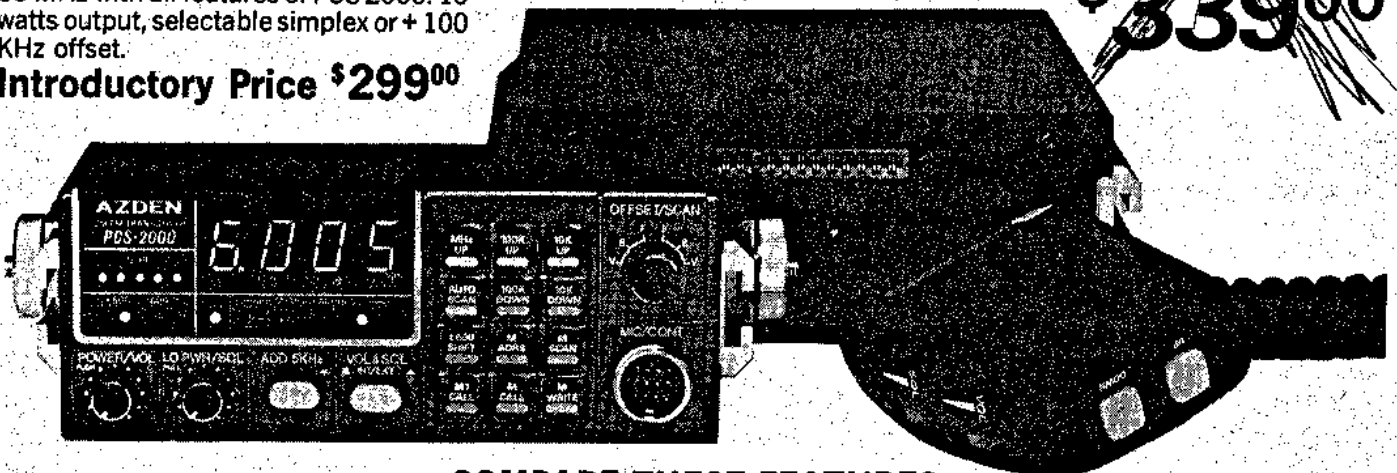
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Power Requirements -- 13.8 V ± 15%, 0.7 A receive, 5.0 A transmit (high power).
Grounding Requirements -- Negative ground.
Memory Channels -- 6. Channel 1 is accessible instantly for priority channel.
Memory Scanning -- Scans for busy channel, vacant channel or free-running.
Band Scanning -- Same as above.
Emission Type -- F3 by direct frequency modulation of vco.
Antenna impedance -- Nominal 50 ohms unbalanced.
Dimensions -- HWD 62 x 158 x 246 mm.
Weight -- Approximately 2.5 kg.

TRANSMITTER

Frequency Coverage -- 144.000 - 147.995 MHz in 5-kHz steps.
Output Power -- 25 watts (high), 5 watts (low), nominal.
Modulation -- Varactor direct fm of vco.
Maximum Deviation -- ± 5 kHz.
Spurious Emissions -- Better than 60 dB down from carrier level.
Repeater Offsets -- Simplex, +600 kHz, -600 kHz; non-standard offset available with extra crystal (+1 MHz provided).
Microphone -- 500-ohm dynamic type.

RECEIVER

Frequency Coverage -- 144.000 - 147.995 MHz in 5-kHz steps.
Receiver circuitry -- Double superheterodyne.
Intermediate Frequencies -- First 16.90 MHz, second 455 kHz.
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Squelch Sensitivity -- Better than 0.1 uV.
Selectivity -- ± 6 kHz or greater at 6 dB down; ± 15 kHz or less at 60 dB down.
Audio Output -- At least 2 watts into 8-ohm load with 10% THD.

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