

# PACK RATS'



## PACK RATS

CLUB CALL: W3CCX

MT. AIRY VHF RADIO CLUB, INC.

# CHEESE BITS



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

ARNS

50.125, 144.50, 432.110, 1296.025 Mhz, WR3ACD - Repeater 222.98/224.58 Mhz

Affiliated Club: AMERICAN RADIO RELAY LEAGUE

Meetings: Third Thursday of each month at 8:00 P.M.

Southampton Free Library, 947 E. Street Road

Southampton, Pennsylvania 18966

VOLUME XXIII

MARCH, 1981

NUMBER 3

### THE PREZ SEZ

Twenty-five years ago this Spring, a group of amateurs in the area met to form a new radio club whose interest would center on the VHF frequencies - the Mt. Airy VHF Radio Club. I wouldn't want to guess what their long range visions were, but they and we have come a long way since 1956 and have a lot to be proud of during this time period. To celebrate this event, the annual Pack-Rat Banquet and Ladies Night will be expanded into a Silver Anniversary celebration. The date for this event is May 2 and was chosen to minimize conflicts with radio contests, major hamfests and the opening of trout season. Mark your calendar now and be ready to send in your reservations when co-chairman Doc, K3GAS, and Harry, W3CL send out the notices. This is an event you won't forget and Doc hints that the bar will again be open. Lots of plans are in the making. As usual, except for our December contest meeting, the banquet and our regular meeting will be open to all - come help us celebrate!

Our best word on the January Contest - the turnout and activity was good with lots of personal records broken with an average score of 15,914 points. Thanks to everyone for a fine effort.

Everyone knows that the club meetings are the third Thursday of the month, but there's another club meeting that's held once a month too. The Board of Directors meet on the 2nd Thursday and location rotates but is always listed on page 3 of Cheesebits. You're always invited to this meeting too and I encourage you to come once in a while or on a regular basis. There's only one bit of a problem tho - be prepared to be asked to work on some project. It may be a big job or a little one, but you'll have fun working with the guys and getting to know them better.

73, Harry, W3IIT

\* \* \*

#### VISITORS - FEBRUARY 19, 1981 MEETING

K3KDF - Bud, Phila., Pa.

WB3EFO - Ed Lee, Huntingdon Valley, Pa.

W3AJS - C.E. Keener, Oreland, Pa.

#### NOTICE

Dues are Due

Regular Members - \$8

Retired Members - \$4

#### TEMPORARY ADDRESS CHANGE

WA3OVH, Peter Shavney

74 Shelburn Road

Springfield, Pa. 19064

215- KI 3-2864

#### CHANGE OF ADDRESS

WB2SZK/6 - Randy Bunum

3634 Deedham Drive, San Jose, CA 95148

408-274-4869 - Home

408-734-2837 - Office

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wise stated, provided that proper credit  
is given.

SWAP SHOP ITEMS - NO CHARGE

DEADLINE FOR ARTICLES IS THE GENERAL  
MEMBERSHIP MEETING: THE THIRD THURSDAY  
OF THE MONTH

EDITOR:

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2087 Parkdale Avenue  
Glenside, Pa. 19038  
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WA3AXV, RONALD WHITSEL  
215-355-5730

AWARDS CHAIRMAN:

W2EIF, JOSEPH KILGORE  
609-783-9478

CLUB HISTORIAN:

W3CL, HARRY B. STEIN

MONDAY NIGHT NETS      NET CONTROL

7:30 PM - 50.125 MHZ      W3CL  
8:00 PM - 144.150 MHZ      W2EIF  
8:30 PM - 222.98/224.58      K3GAS  
9:00 PM - 432.1 MHZ      K3IUW  
9:30 PM - 1296.025 MHZ      W3CXU  
PACK RAT REPEATER 222.98/224.58 MHZ  
LOCATED IN CHURCHVILLE, PA.

OFFICERS: 1980-1981

PRESIDENT: W3IIT, HARRY BROWN  
VICE-PRES: WA3JUF, DAVE MASCARO  
COR. SECY: WA3WAS, STEVE SIMON  
REC. SECY: K3IGX, DICK BOYLE  
TREASURER: K3GAS, DOC CUTLER  
DIRECTORS:

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

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(215) 822-0808



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(215) JA 8-6998

414 SANSON STREET  
UPPER DARBY, PA. 19082

**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

MARCH

- 3 Ash Wednesday
- 6 For you olde movie buffs - remember that great John Wayne Movie - well, today is the anniversary of the Alamo Massacre - "Remember the Alamo"
- 7-8 ARRL International DX Contest - Phone - See Dec. QST, Pg. 92 Rules. Here is a good chance to add to your DX Collection.
- 12 Board of Directors Meeting - QTH - WA3YUE, Bruce Loss, 3747 Warfield Drive, Huntingdon Valley, Pa. Phone: 947-8161 if lost. Directors and interested parties ALWAYS invited. Come on around once, give us your views and help run the Club.
- 13-14 For you snowbirds - Orlando Florida Hamfest
- 14 Boy Scout Exhibition Station - look for them on the various bands.
- 15 DVRA Hamfest - New Jersey National Guard Armory, Eggerts Crossing Road, Lawrenceville (Trenton Area), N.J. Info: DVRA, P.O. Box 7024, West Trenton, N.J. 08628. A nice local Hamfest and only about an hour from Phila. town.
- 14-15 QCWA QSO Party - Phone - All bands - See QST for Rules.
- 17 Everyone is IRISH Today - St. Patrick's Day - be sure to be awearin of the green!!
- 19 General Club Meeting - Southampton Free Library - Street Road, Southampton, Pa. 8:00 PM Topic: Antique Wireless - Special Slide and Talk Show Exhibits; The Mario Raffle; Frankie's Silent Auction; Refreshments. An open meeting to one and all. Bring your friends and ham buddies....
- 20 Officially the First Day of Spring - Time to get to the garden and lawn department. Don't waste the water!!
- 21 Flemington Hamfest - Hunderton CHS - Gym Bldg., Flemington, N.J. Info: P.O. Box 338, Quakertown, N.J. 08868
- 24 Penn Arc Open House at Montgomery County Community College.
- 26 R.F. Hill ARC Spring Auction - VFW Post, Off Old Route 309, Sellersville, Pa. 7 PM A good fun evening and just the place to move some of the goodies around, from your basement to who knows where..food and liquid refreshments available on the spot!
- 27 To all you retirees - you would be in big trouble today if Ponce de Leon hadn't discovered Florida in 1513. Suppose he had discovered Iran instead - where would you be today..huh...
- 29 Penn Wireless Association Hamfest - National Guard Armory - Roosevelt Blvd. and Southampton Rds., Phila., Pa. A very good hamfest and only minutes away from most of us club members. Come on out and support them and maybe take home a bargain or two. Info: WB3DLF, Tom Gallagher, P.O. Box 734, Langhorne, Pa. 19047.
- 28-29 CQ WPX Contest - Phone
- 30 Alaska purchased from Russia in 1867.

(CONTINUED ON PAGE 6)

NEW PRODUCTS OF INTEREST TO HAMS

By Lyn, W3NSI

1. AMPLIFIER KIT - 432 MHZ: Communications Concepts Inc., is selling their KEB 67 432 Mhz 100 watt amplifier kit by mail, less heat sink, case, and connectors. The PC board is also available, for those who like to roll their own. The unit uses push pull MRF 309 transistors and is rated at 40% or better efficiency. Driving power requires up to 15 watts for 100 watts output. Voltage 28DC. Price \$99.95. PC Bd only \$12. 2648 N. Aragon Ave., Dayton, Ohio 45420
2. DISH ANTENNA 2-3 GHZ: Data Service Co. now has a type PRO 25-2 kit designed to operate in the 2-3 Ghz band with a gain of 20 DBI. Dish diameter is 25" and weight is 5 1/2 pounds. Wind loading, as expected, is high since the aluminum dish is solid. Rated at 75 pounds at 70 MPH, the antenna can be mounted with 2 U clamps to a regular mast. Feed horn and all mounting hardware are included in the kit. A type BNC fitting is standard, N on special order. Price \$69.95 (+ \$5 ship) - 3110 Evelyn St., Roseville, MN 55113
3. YAESU FT 720 R: This new mobile rig allows operation on both 2 meters and 3/4 meters by using one control head and two RF decks. Unit may be ordered with either or both decks. The 2M section is rated at 25 watts out while the 3/4M unit puts out 10 watts. Both sections are synthesizer controlled in 10 Khz steps on 2, and 25 Khz steps on 3/4M. A four digit readout shows last four digits of operating channel. The UHF unit covers 440-450.

\* \* \*

VHF/UHF REPORT

By Joe, W2EIF

The six meter band has shown some activity lately. The band was open to Central and South American Stations on the 3rd and 4th and 5th of Feb. TI2NA and TI2 and an HK4 were coming through quite well during the period. Back scatter was very good with the 4,5,8,9 and 0 sections well represented.

2 meters continues with some activity on SSB around 144.2 Mhz.

W2AXU reports a major flair as of 2150 UTC on Feb. 18. (Just in time for meeting nite) There have been a number of flairs this past year but there have not been many auroras as a result. Wonder why?

K1PXE and myself (W2EIF) continue with our Tues. nite schedule at the low end of 220 between 8:30 and 9:00 EST. So far, not too many have joined us. Pete (K1PXE) and I have made it on 1296 quite a number of times this Winter. Hope to hear you on some band!!

\* \* \*

FROM NEVH NEWS

7th Annual Eastern VHF/UHF Conference: This popular conference will be held May 16-17, 1981 at the Sheraton Buxboro (same location as last year). Planning is now under way under the expert leadership of W1JR. This year the technical programs will all take place on Sat., with presentations planned on microwaves, antennas, propagation, getting started on 1296 and/or 220 Mhz, etc. Sat. evening will feature the usual banquet (your editor thought the food was excellent last year; much better than typical banquet food), speaker, and prize drawings. Sunday will be devoted to the popular antenna gain and noise figure measuring activities (keep your fingers crossed for good weather) with plans in the works for both 23 cm and 70 cm antenna measurements this time. Mark the dates on your calendar now, and watch for more detailed announcements in the near future.

\* \* \*

FROM WORLD RADIO - SOLAR INFORMATION

A few notes on the new service to Amateur Radio-The Solar Flare Hotline Service. NASA has just announced this service, which provides info. on solar flares, geomagnetic activity, solar flux levels & sunspot activity on a 24 hr. basis. The reports will also include, when appropriate, an assessment of the impact of the sun's behavior on radio transmission. Solar flares often disrupt ionospheric propagation on all HF bands for up to an hr. or so at a time.

SWAP SHOP

FOR SALE: Cleaning House - Ham, CB (AM/SSB convertable to 10 mtrs) test equip., etc. All equip. in good condx. You arrange pick-up. SASE for list.

CONTACT: W2GQK, 619 Boundary Rd.  
Pitman, N.J. 08071

FOR SALE: 520 Kenwood, Mint cond. \$500 or best offer.

CONTACT: Ed. WB3DVN  
Phone: 215-887-6758

FOR SALE: Heathkit HF SSB station - HW101 Xcvr. pwr supply, mike, CW xtal filter, spkr & cabinet, new finals. SB-200 linear amp. 10-80 mtrs. CW/SSB 1200 watts Pep. Both units fully operational. Price is negotiable.

CONTACT: Ric, WB4ZQI  
Phone: 215-646-4768 after 6 PM

FOR SALE: Microlog AKB-1 CW keyboard, mint cond. w/manual \$200. Icom-215A - 2 mtr all mode scanning transceiver - new cond. \$490.

CONTACT: Bill Benner, W3KM  
Phone: 215-224-1489 anytime.

WANTED: 10V CT, 10A filament Xformer.

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

WANTED: 1-8877 brand new, 1-8877 used.

CONTACT: Gene, WB2UVB  
Phone: 609-234-3926

WANTED: Any model, VHF lin. amp. (G.R. stephen co. K1FO) to convert to 200 Mhz or RF section only of same. ELMAC 8874 tubes. 1296 Mhz pwr. amp. pair 7289's to drive with 10W. and give 100W. or more out.

NEED: - KLM Ant. and director insulators. Bird mod. 43 wattmtr element, 100 or 250W. 1.1-1.8 GC. Unelco Mica caps. 22,30,39 PF., Data for 2.3 GC rcvr L.N. RF amp/mixer, transco relays, spdt.

CONTACT: Jonnie Allen, W3CXU  
1119 Highland Ave.  
Abington, Pa. 19001  
Phone: 215-886-4109

FOR SALE: HX-30 SSB 6 mtr. xmtr. B&W SSB rcvr adapter. Swan 120 w/pwr sply. 2 mtr. 8 el telrex beam. Dow key 12V. ant. relay with N type connectors. Heath SB500 - 2 mtr. transverter unassembled in original carton. Panadap PCA-2.

CONTACT: K3HSS, Charles Lustik  
Phone: 215-342-4398

FOR SALE: 2 Motorola base station cabinets, 19" x 6' \$25 for both. Regency 10 channel scanner H-L-UHF w/xtals - \$110. Relay rack, 19"x7' \$15. Commercial low band base station ant. 40 Mhz. \$25. CB base station ant. \$15.

CONTACT: Steve, WA3WAS  
Phone: 215-672-6486

FOR SALE: Clegg Venus/spkr, pwr sply, Apollo linear amp. 650 watts input. Clegg SS booster type A, mike; 220 colinear ant; 3-2 mtr ant; 10-15-20 Jr. tri-bander; 2 - old 220 AM rcvrs; 1-220 AM complete xmtr; 1 old Navy rcvr. must buy whole pkg. or my XYL will throw me out! \$350.

CONTACT: K3KTY - John Tate  
Phone: 215- OR 3-8840

FOR SALE: Seasoned pine wood shelves, one edge hardwood finished, 12x39x5/8". \$1.50@ 2 - stereo knockdown component racks - new \$25@. Portable stereo phonographs \$10 to \$35. New pre-recorded 8 trk. tapes 50¢ @. New pre-recorded records 3 for \$1. 8 trk players, cassette players & recorders, remote control race cars, trucks, tow truck, tanks, dump tractors, dune buggies, etc. Phono turntables, perf box kits, meters, knobs, switches, pots, caps, chokes, xfms, speakers, miller coils & chokes, etc. Incense burners & incense as low as 50¢

CONTACT: Doc, K3GAS  
Phone: 215-635-1078 after 1 PM

FOR SALE OR SWAP: KLM 160 W 144 Mhz SS pwr amp. Model 160BL, Ser #426, Manual \$150. Autek audio filter, model QF-1, manual and revision date \$20. Heathkit hybrid phone patch model HD-15, manual, mint \$20. Amplex 144 Mhz 90W. pwr amp - 5894 tube = make offer. Clegg 220 Mhz FM xcvr - FM 21, manual - operating cond. \$35. Hygain 10-80M vert. ant-model 18AVT - WB/A-needs repair to 80 mtr coil mtg - manual & data. \$20 make offer. Precision model 1904 decade condenser - make offer. Telephone ans. unit, "Code-A-Phone" #1400 w/remote call in. \$125 central electronics RF analyzer (3in.scope) #MM2, W/book, needs work, make offer. Lafayette 7 ft. parabolic UHF tv dish-new in carton-\$25. R-48 rcvr. op.cond. free with purchase of any item. 35 ft. tapered alum. light pole, w/hinge parts and rotator mt. extension - make offer.

CONTACT: Jonnie Allen, W3CXU  
1119 Highland Ave. Abington, Pa. 19001  
Phone: 215-886-4109

CALENDAR OF COMING EVENTS  
CONTINUED

March

28,29,30 2nd Annual Spring VHF QSO Party - Sponsored by the RAMAPO MOUNTAIN ARC. From 1800 Z March 28 until 0400 Z March 30. change signal report and ARRL Section. One QSO point for each 50-144 Mhz contact. Two points for each 220-450 Mhz contact. Three points for each 1215 Mhz and up. Multiply by the sum of ARRL Sections per band. Rules are the same as for ARRL VHF QSO Parties EXCEPT FM Operations not permitted below 450 Mhz. Use ARRL QSO Party or similar forms. Mail by 27 April to Ramapo Mountain ARC, P.O. Box 364, Oakland, N.J. 07436.

MARK YOUR CALENDAR: Saturday Evening, May 2, 1981 is the date for the 25th Anniversary Banquet and a gala celebration at the Warrington Motor Lodge, Rte. 611 and Street Road, Warrington, Pa. K3GAS & W3CL co-Chairmen.

\* \* \*

TID BITS

To Bobbie Weinstein - our apologies - Hal - K3HW/6 didn't have a Mildred - a typo for sure - hi!

Another apology to "Mother Rat" - that guy Lee - I can't keep up with him! The club organization date was May 15, 1956 as you point out - won't let it happen again Helen - 88

George and Gracie Van Dyke (W3HK) dashed off to Hawaii right after the VHF SS - received an outstanding card from them - back home now.

Charley Cloud, WB3CPW spent a few days in the hospital last month. Home now taking it easy.

The Central States VHF Society has issued a 1296 directory. For a copy, send a legal (4 1/2"x9 1/2") envelope with 28¢ postage to Al Ward, WB5LUA, Rt. 7, Box 32, McKinney, Texas 75069. If you want to be listed, indicate your TX Power, modes & antenna type. Addresses and phone numbers are provided for schedules.

A similar list for 220 MHz has been made up by Lee Fish, K5FF in her 220 Newsletter. Send an SASE for more info. on what's happening on 220 and any report you may have of local activity.

Al Boblitt, K3EOD, was hospitalized at the Frankford Hospital for a number of weeks. Expected to be out by the end of February.

Paul Capone, WB3CPT went off to Canada for about three months. Says he likes working up there.

Doc, K3GAS, is the registration chairman of the Liberty Dental Conference meeting at the Sheraton Hotel, 17th and JFK Blvd., Phila., Pa. from March 8 to 11. Stop in and see Doc if you are in the downtown Philly area.

Carl Barish, reports that things are looking up in Seattle with many music shows and other performances coming to town. Sends his 73 to the gang. Carl, will print your card starting with the June issue.

John, K3KTY, sends the following -.if you were a GI during the War years, you may send for a dividend on the GI insurance - give your name, address, soc. sec. no., Army Ser. No. Branch and date of service. Send to Capt. V.R. Prosser, USXI Veterans Center, P.O. Box 8097, Phila., Pa. 19101.

Sun Watcher, Jack Power, W2AXU, reports the smoothed number for May 1980 is 157.0, the mean number for January 1981 is 114.7.

Received a note from Randy Bynum, WB2SZK/6 who reports that they are finally unpacked. Hopes to get on 15 meters and join Gary and Ron (AXV) on their sked. Sends his 73.

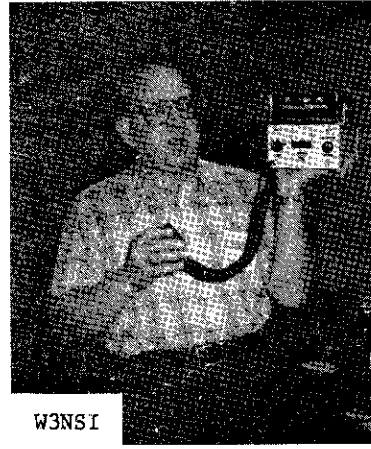
The FCC will be moving from the Phila. office to the OXFORD VALLEY MALL, Suite 404, Langhorne, Pa. The move is expected to be made sometime during the month of March, 1981.



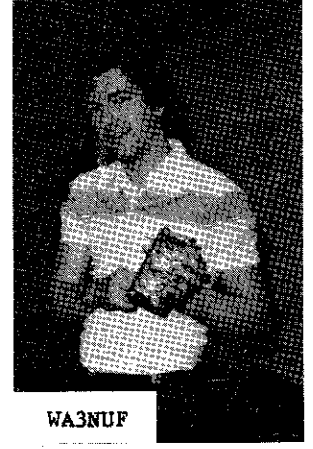
WB3KES



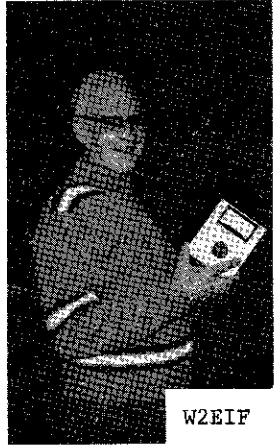
WA3JUF



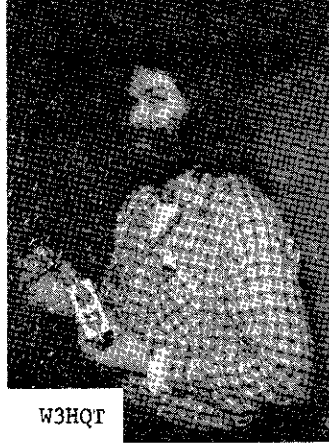
W3NSI



WA3NUF



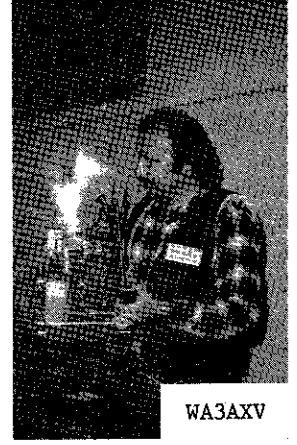
W2EIF



W3HQT



W3CXU



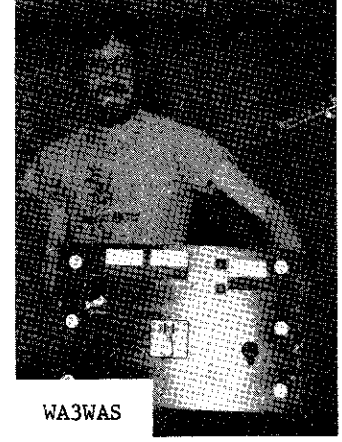
WA3AXV



WA3NDE



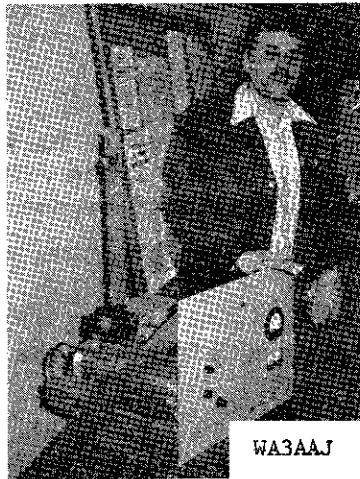
THE WINNERS



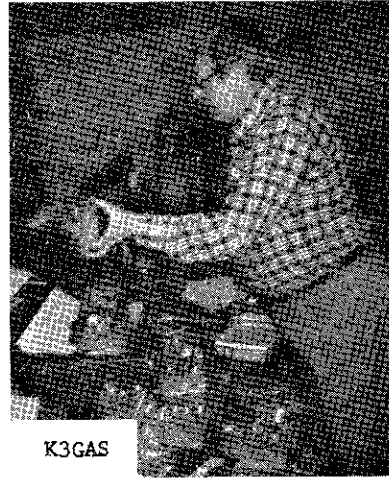
WA3WAS



WA3YUE



WA3AAJ



K3GAS



WB3JYO

# HOME BREW

Photos by WA3AXV

SOLAR INFORMATION CONTINUED

The number to call for this service is 301-344-8129. This is a TOLL call, but the service is free. There is a great deal of scientific information given in very technical terms, but it also gives solar assessments which should be very useful in determining day-to-day conditions on the HF amateur bands.

Now that the winter contest period is approaching, this info might be of some use to any serious contester out there. QUARAE, Erie, PA.

\* \* \*

HOMEBREWER PARTICIPANTS

K3GAS - Perf. boxes - some worked. some didn't.  
WA3AAJ - 432 Mhz amplifier  
W2EIF - very low power output meter.  
WB3KES - 6 and 2 mtr. power amplifier (modified 6N2) plus carrier operated relay.  
W3NSI - 220 Mhz scanning receiver.  
WA3AXV - 1296 Mhz solid state transverter from 28 Mhz plus HBO converter.  
WA3NUF - 6 meter receive converter.  
WB3JYO - 2 meter receive converter plus 2 meter transverter from modified AM tecraft 2 mtr. unit.  
W3HQT - 1296 Mhz 10W. linear amplifier/2304 Mhz 2 W. doubler.  
WA3NDE - 2 meter cubical quad apartment house invisible antenna.  
WA3WAS - 6 meter 4CX1000 amplifier.  
W3CXU - 1296 Mhz gasfet pre-amp.  
WA3JUF - 220 Mhz linear transverter - 1 watt out from 144 Mhz drive.  
WA3YUE - computerized CW copier.

WINNERS AS FOLLOWS:

Most Ambitious - WA3AXV, Runner-up WB3KES. Most Unusual - WA3YUE, Runner-up - W2EIF.  
Best Construction - WA3WAS, Runner-up - W3NSI. Most Miserable Failure - K3GAS.

\* \* \*

JUNE 13/14, 1981 VHF QSO PARTY

Chairman, Bill Olson, W3HQT, has appointed the following team captains:

6 meters - WA3AXV - N3AHI  
2 meters - WA2DPU  
220 Mhz - WA3WAS  
432 Mhz & EME - W3HQT  
1296 Mhz - WA3JUF  
2304 Mhz - W3HMU

All members are urged to get in touch with these captains so we may have full participation!!!

\* \* \*

ANNOUNCEMENT

Dutch Treat Lunch 'N Beer Eyeball. 2nd Saturday of month at 12:00 noon. HB's Pub & Club - North on Roosevelt Blvd. between Cottman (Rt.73) and Tyson - Next to K-Mart - Plenty of free parking. Ham radio operators either Club affiliated or not and their friends are invited. Contact: Al, W3AYJ. Phone: 725-2869.

\* \* \*

Best wishes to Woody Haldeman, W3PST, the new editor of the Philmont BLURB.



THE MT. AIRY VHF RADIO CLUB, INC.  
 JAN. 17/18 - 1981 VHF SS  
 COMPARATIVE SCORES

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2-6-81

| <u>CALL</u> | <u>1980</u><br><u>SCORE</u> | <u>1981</u><br><u>SCORE</u> | <u>CALL</u> | <u>1980</u><br><u>SCORE</u> | <u>1981</u><br><u>SCORE</u> |
|-------------|-----------------------------|-----------------------------|-------------|-----------------------------|-----------------------------|
| WA3AAJ      | 20284                       | 25650                       | WA3IWT      | 5320                        | 8946                        |
| K3ACR       | 26104                       | 22568                       | K3JJZ *     | 15888                       | 22368                       |
| W3AJF       | 9320                        | 9600                        | WA3JUF      | 30914                       | 14212                       |
| WA3AQA      | 17986                       | 12768                       | WB3JYO      | ////                        | 19750                       |
| N2AQJ       | 10648                       | 4600                        | WB3KES      | 2352                        | 9324                        |
| WA3AXV      | 77064                       | 80770                       | W3KKN *     | 50112                       | 52536                       |
| K3BPP       | 19536                       | 18576                       | W3KM        | ////                        | 2898                        |
| W3BRU       | ////                        | 792                         | K3KMN       | 6188                        | 1404                        |
| WB3CDE      | 48840                       | 54094                       | K2KRC/3     | 4342                        | 2784                        |
| N2CG        | ////                        | 14256                       | K3KTY       | 17760                       | 16224                       |
| W3CJU       | 24550                       | 18480                       | K3KVS       | 13120                       | 14564                       |
| W3CL        | 22494                       | 22656                       | K3LOM       | 30218                       | 27832                       |
| WB3CPW *    | 9480                        | 13156                       | K3LYB       | 2054                        | 3200                        |
| W3CXU       | 10044                       | 9450                        | N3MW        | 19916                       | 23732                       |
| K3DLS/M     | 1968                        | 1776                        | K3MWV       | 68904                       | 33988                       |
| K3DMA       | 7128                        | 13156                       | K3MXM       | 12840                       | 15640                       |
| WA2DPU      | 62650                       | 61040                       | WA3NDE      | 672                         | 528                         |
| N3EG        | 18240                       | 11592                       | WA3NFV      | 19604                       | 19136                       |
| W2EIF       | 35438                       | 33600                       | K3NHX       | 14826                       | 14564                       |
| K3EPB       | 8532                        | 8388                        | W3NSI       | 8840                        | 8288                        |
| W2EVW       | 1944                        | 6248                        | WA3NUF      | 21022                       | 22080                       |
| W3GAS       | 11520                       | 14288                       | WA3OVH *    | 8400                        | 16240                       |
| W2GGB       | 5208                        | 7590                        | K3PHY       | 3696                        | 3094                        |
| W3HFX       | ////                        | 31096                       | K3QQ        | 5728                        | 2976                        |
| WB3HHO      | 8204                        | 7280                        | WA3QWO      | ////                        | 1300                        |
| K3HIN       | 10438                       | 8100                        | WB2RVX      | ////                        | 13262                       |
| WA3HIT      | 6604                        | 6496                        | WB2RXM      | ////                        | 1344                        |
| W3HK        | 10340                       | 4410                        | WA3TEM      | 1968                        | 2592                        |
| W3HMU       | 34452                       | 26736                       | WA3TSE      | 9476                        | 6468                        |
| W3HQT       | 70344                       | 56140                       | K3VEQ       | 728                         | 702                         |
| K3IGX       | 11924                       | 15224                       | WB2VLA      | 10416                       | 12420                       |
| W3IIT       | 29808                       | 25532                       | K3VYG       | 12008                       | 13692                       |
| WA3IMT      | 528                         | 3990                        | WA3WAS      | 29904                       | 46376                       |
| WB3IND      | ////                        | 4250                        | WA3YUE *    | 32368                       | 38460                       |
| K3IQO       | 1680                        | 4380                        | W3YXF       | ////                        | 4650                        |
| K3IUV       | 33750                       | 31300                       | W3ZD        | 10208                       | 37120                       |
|             |                             |                             | K3ZPN/2     | ////                        | 624                         |

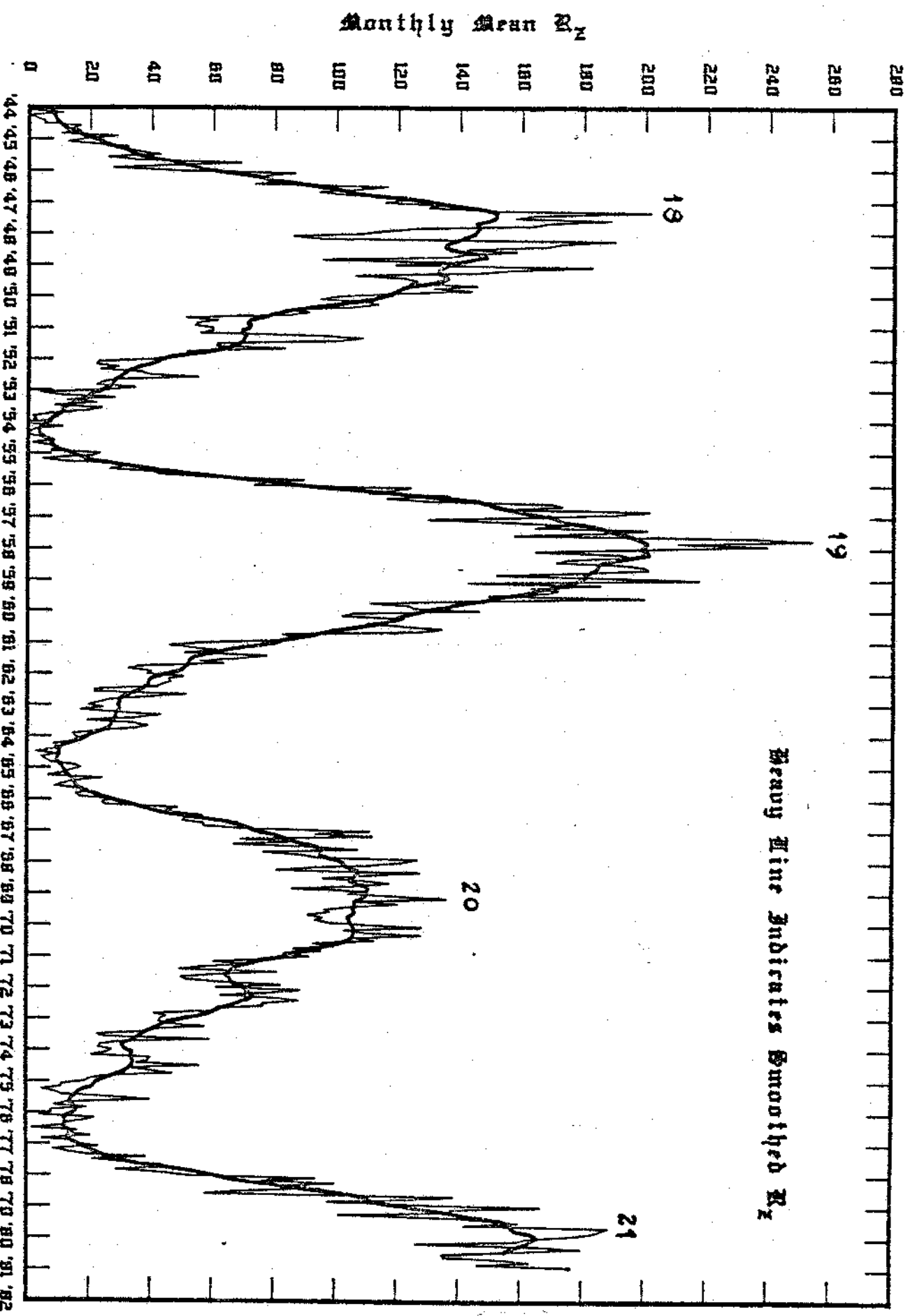
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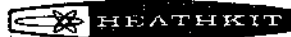
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