

PACK RATS'



PACK RATS

CLUB CALL: W3CCX

MT. AIRY VHF RADIO CLUB, INC.

CHEESE BITS



MT. AIRY VHF RADIO CLUB, INC., PHILADELPHIA, PENNSYLVANIA ARNS
50.125, 144.150, 220.125, 432.110, 1296.110 Mhz, W3CCX - Repeater 222.98/224.58 Mhz.
Affiliated Club: AMERICAN RADIO RELAY LEAGUE
Meetings: Third Thursday of each month at 8:00 P.M.
Southampton Free Library, 947 E. Street Road
Southampton, Pennsylvania 19866

VOLUME XXVI

DECEMBER, 1984

NUMBER 12

THE EDITOR SEZ

Dave Power, WB2VLA, our Prez asked me to pinch-hit for him this month with a pep message for the upcoming January VHF SS (Jan. 12 & 13, 1985). First, Kudos to Rich Connor, WB2NPE and Bob Cook, N2SB, the Co-Chairmen this year, for all their FB work to date. Our VEEP, Mike Gullo, WB2RVX has prepared an excellent custom beam headings and distance chart based on grid squares. You will like this addition to the contest package. Lets not forget the Kilgore Kid, W2EIF who will be mailing our reminders to 350 of our DX friends.

A major change in the 1985 VHF SS Contest Rules requires that grid squares be exchanged instead of ARRL sections. Anytime there is a drastic change in rules, some of our Pack-Rats slink away to their hidden nests - this is especially true of the old timers (not me - please - I participated in four grid square contests and had a barrel of fun - no kidding).

Note the important rule changes: Grid squares instead of ARRL sections; A grid square counts as a multiplier on each band worked -- example: FN 20 worked on 2, 6, 220, 432 counts as 4 multipliers. No serial number to be sent; SIG report optional - however, time of contact must be noted in GMT. You will receive complete rule info. in your second contest package. For our friends, look in the December 1984 QST.

Come out to the December meeting on the 20th and get the latest including a special tile for your kitchen wall. What is your grid square -- mine is FN 20.

The best for the upcoming holidays.

Harry, W3CL

* * *

1296 MHZ AMPLIFIER

By D. Mascaro, WA3JUF

Last month I described an SD1333 amplifier using the MRF901 circuit. The following is for the SD1359 amplifier. The pc board is modified by cutting the width of the input line with an Exacto knife. Trim to 0.070" wide. Only two trimmers are required, so the others on your 901 board can be removed. Setting the bias for Icq of 70-80 ma. is the only other change. The amplifier will do 300 mw Output with around 50 mw of drive. (See Page #7).

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: THE THIRD THURSDAY OF THE MONTH.

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W3CL, HARRY B. STEIN

MONDAY NIGHT NETS

7:30 PM - 50.125 MHZ

8:00 PM - 144.150 MHZ

8:30 PM - 222.98/224.58 MHZ

8:45 PM - 220.125 MHZ

9:00 PM - 432.110 MHZ

9:30 PM - 1296.1 MHZ

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K3GAS

KS2T

K3IUUV-NF2L

W3HQY

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CALENDAR OF COMING EVENTS
Syllabus by Lee, K3MXX

DECEMBER:

- 1-2 160 Meter Contest - Information November QST Page 87
- 2 Sunday Nite - 7 P.M. Teleconference Net - Subject: PACKET RADIO. Speakers: Lyle Johnson, WA7GXD and Harold Price, NK6H. Tune in and participate via MARC Repeater (147.06) located in Radnor, Pa. These Nets link about 150 Gateway Stations together and it is estimated that as many as 75,000 Radio Amateurs are listeners and there are untold others who listen via scanners.
- 3 First Neon Light Display - Paris, France Expo 1910
- 8 10 Meter Contest - Information November QST Page 87
- 9 NJ/NY/PA - Microcomputer show and flea market; 10:00 A.M. Meadowlands Hilton Hotel, off Rt. 3, Secaucus, N.J.
- 9 First Christmas Seals issued and sold 1907
- 13 Board of Directors Meeting - QTH W3IIT, Harry Brown. 3012 Potshop Road, Norristown, Pa. Directors and interested parties always welcome to attend and participate.
- 15 James Naismith invented Basketball - Canada 1891
- 19 CHANUKAH
- 20 General Club Meeting - Southampton Free Library, Street Road, Southampton, Pa. 8:00 P.M. Final get-together and strategy planning for the Contest. The Mario Raffle, Frankie's Silent Auction, Refreshments.
- 21 Winter solstice 11:23 EST, or in plain words, if you ain't cold now, better button up for WINTER is officially here....
- 25 Merry Christmas - One and All!!!!
- 31 HAPPY NEW YEAR!!!

ARE YOU READY FOR THE ARRL JANUARY 12 and 13, 1985 VHF SS CONTEST!!!!!!

* * *

VISITORS NOVEMBER 15, 1984 MEETING

WB3DNI - Pat Cawthorne, Warminster, Pa.
David Fazio, Southampton, Pa.

WB8ZAR - Dave Martin, Cinnaminson, N.J.

KA3MGB - Don Lauer, Kutztown, Pa.
KA2CQX - Janice Bond, Moorestown, N.J.
WB2UVB - Gene Bond, Moorestown, N.J.
W3BWQ - Sam Santoro, Blue Bell, Pa.

REINSTATED TO MEMBERSHIP

KA3MGB - Donald Lauer
RD 4 - Box 361
Kutztown, Pa. 19530
215-683-6006

VOTED TO MEMBERSHIP

WB8ZAR - David Martin
102 Erlington
Cinnaminson,
N.J. 08077
609-829-6824

APPLICATION FOR MEMBERSHIP

WB3DNI, Patrick
Cawthorne
268 Bloomfield Road
Warminster, Pa.
18974
215-672-5289

NEW PRODUCTS OF INTEREST TO HAMS

By Lyn, W3NSI

1. MIZUHO RECEIVING PRE-AMP: The Mizuho SX3 is a low noise preamp which can be used with sw receivers or with a transceiver that has a remote control conx. that can operate the relay built into the SX3. Gain is rated at 15 db and is adjustable from the front panel. Unit has a built in P.S. and covers the 3-30 MHz range in three bands. Price \$79.90 Ace Communications 22511 Aspan Street, Lake Forest, CA 92630
2. ROTATABLE SLOPER DIPOLE FOR 75/80 METERS: Vector Radio Co. has a 28 foot rotatable Sloper antenna for 75/80 that can be tuned for minimum SWR by means of a motor driven system located in the dipole center section. Unit weight is 12 pounds and it can be rotated with a TV rotor. Due to the mounting angle of the antenna, the turning radius is only 10 feet. An 8 conductor cable is required for control. A 50 ohm coax feedline is used. A 40 meter dipole is also available. Price \$295 - P.O. Box 1166, Cardiff, CA 92007
3. TENTEC CENTURY 22 CW TRANSCEIVER: The new Century 22 replaces the model 21 which was popular with the QRP crowd. The 22 runs 50 watts input and covers 6 bands from 80 - 10 meters. A variable audio filter, automatic gain control, SWR bridge, and S meter are featured in this new rig. Price #389.00.
4. VERTICAL ANTENNAS FOR 1296: The NCG Co. is selling a pair of 1296 antennas for base and mobile operation. The GP 714 for base or repeater use is rated at 30 watts max. power at 50 ohms impedance. Length is 6 feet. Gain is rated at 10.8 DBI with an SWR of 1.3 or less. The GP 1270M for mobile operation is rated at 15 watts max. power with a gain of 8-9 DBI. Length is 35 inches and the price includes a mobile mount. These colinear antennas cover the range 1260 - 1300 MHz. The mobile version uses 10 half waves while the base unit uses 17 steps. Price \$98 - Base; \$60 - Mobile. 1275 N. Grove St., Anaheim, CA 92806

* * *

TID BITS

Sunwatcher, Jack Power, W2AXU, reports the Monthly No. for October 1984 = 12.6 Smoothed No. for April 1984 = 49.4.

Missed seeing John and Barbara (K3KTY) who were visiting the local Phila. area up from Florida. Catch you folks the next time, de W3CL.

Many thanks to Gene, WB2UVB, who played an FB ARRL videotape on the W5LFL Columbia Shuttle event at our last meeting.

WB2WIK, Steve gave a pitch on the CQ worldwide VHF WPX Contest at the November 15th regular meeting.

Congratulations to Mike, N3BBI, who upgraded to General - says he is already making a 40 Meter antenna

Pack-Rats are coming out of the woodwork - new antennas up ---- new rigs on the line amplifiers being built ... look out!

* * *

A REMINDER ... DUES WILL BE DUE NEXT MONTH ... WHY NOT PAY NOW FOR 1985

SWAP SHOP

FOR SALE: Telex Long John 6 mtr. wide spaced 6 element monobander beam - \$50.
CONTACT: John McCarthy, KC3OK
 Phone: 215-379-8385 (After 5 PM)

FOR SALE: Heathkit SB 102 - 80 - 10M xcvr, HP32 supply, SB600 spkr, mic. & manual \$250. Heathkit SB301 - 80 - 10M rcvr & manual \$100.
CONTACT: Dave Mascaro, WA3JUF
 Phone: 215-362-8500 X247 (work)
 215-795-2648 (home)

FOR SALE: Kenwood R-599 ham rcvr \$175. Hamtronics - Xmit converters - 28 - 50 Mhz; 28 - 144 Mhz. Both assembled & tested \$60.
WANTED: Kenwood - TS-820S
CONTACT: Bruce Loss, WA3YUE
 Phone: 215-542-6490 (work)
 215-947-4166 (Home)

FOR SALE: 12 in. black & white Conrac video monitor w/schematic - it works \$15.
CONTACT: Richard Prim, WA3IWT
 Phone: 215-355-1192

FOR SALE OR SWAP: R390A rcvr; Robot 400 SSTV; Robot 800 CW/Rtty, SSTV.
CONTACT: K3GYS, Gus
 Phone: 609-767-3628

WANT TO TRADE: Icom IC-3AT, 220 FM HT for an Icom - IC-2AT, 2M FM HT - even trade.
CONTACT: Steven, KC8M
 Phone: 215-443-6759/6064 -
 NAS, Willow Grove, Pa.





FOR SALE: 2 mtr. xvrtr for 28 Mhz (club project) \$35. Lafayette HA 350 rcvr - exc. cond. \$60. Federal sig. generator 8-300 Mhz \$25. Attractive Seth Thomas wall clock, 110 V. \$5. Coils - B&W, poly, airdux - 50 cents each; 4 ft. rack on wheels contains 2 mtr. AM xmr & VFO, modulator, pwr sply - 5894 final amp 6 mtr. AM xmr & VFO, modulator, pwr sply - 82 final amp. Cassette or 8 trk - blank or pre-recorded. Small portable radios, speakers, tube meters, electrolytic caps; feed thru & stand-off caps; knobs & resistors. Old model rail-roader magazines.
CONTACT: Doc Cutler, K3GAS
 Phone: 215-635-1078

FOR SALE: TV System. Robot 400 scan converter \$315. Robot 800 terminal \$275. Robot MP-70 monitor \$170. RCA TC-1000 video camera/TRIPOD +125. Total \$885.00. Kenwood TR2400 HT, exc. condx., including chg. (wall) rubber duck carrying case, book \$210. Okidata Y82A micro-line printer \$250. Yeasu FT-101 B & spectronics DD-1 digital R/O \$375. Drake MN-2000 antenna toner \$200. Hal System: CT-2200 communications terminal KB-2100 keyboard \$625. Rotor/ 20 ft. section of tower, 2 cushcraft 11 element beams, HQ-1 (6,10,15,20 Mtr) mini beam - \$100 "You Take Down".
CONTACT: Tony Musero, K3UKW
 1609 So. Iseminger Street
 Phila., Pa. 19148
 Phone: 215-271-8898

* * *

<u>MODE</u>	<u>DESCRIPTION</u>	<u>EMISSIONS DESIGNATORS</u>	
		<u>OLD DESIGNATOR</u>	<u>NEW DESIGNATOR</u>
Morse	On-off keying of carrier.	A1	A1A
	Frequency shift keying.	F1	F1A
	Audio frequency shift keying. (audio tone into an FM rig)	F2	F2A
Telephony	DSBWC (AM)	A3	A3E
	FM	F3	F3E
	SSBSC	A3J	J3E
	DSBSC		A3E
RTTY	Frequency shift keying.	F1	F1B
	Audio frequency shift keying of an FM carrier.	F2	F2B
Facsimile	Frequency shift keying.	F4	F3C
	Audio frequency shift keying		F3C
Television	Fast scan TV using AM DSB	A5	A3F
	Fast scan TV using vestigial Sideband	A5	C3F
	Fast scan TV using FM	F5	F3F
	Slow scan TV		F3C
	Combined vision and sound AM double sideband		A8W
	AM vestigial sideband		C8W

(Reference: Radio Communication - RSGB - October 1984) (Tnx - W2AXU)

<p>THE Best To All FROM Reg & Lee Cohen K3MXM 2</p>	<p>MERRY X-Mass Warren - WB2ONA Sue - N2CYM Steven - BABY</p>	<p>HAPPY HOLIDAYS WIL K3PHY</p>	<p>Season's Greetings Harry W3IIT & Rose</p>	<p>MERRY XMAS + HAPPY NEW YEAR DAVE W3JHF BARB DAVE JR.</p>
<p>SEASONS  GREETINGS FROM MAINE W3HQT/1 Bill + SANDY</p>	<p>HAPPY HOLIDAYS JOHN AND BARBARA K3KTY From Florida</p>	<p>SEASONS  GREETINGS FROM DAN W3NFW (ET AL) </p>	<p>HOLIDAY GREETINGS DE GRACIE - W3BJQ ES GEORGE - W3HK</p>	<p>Happy Holidays DE W3AJS 160 METER ED 3</p>
<p>Seasons Greetings From Helen Brick "Mother Rat"</p>	<p>HAPPY HOLIDAYS FROM THE PATTISONS RICH, JORGE & KAYE K3ACR</p>	<p> WISHING ALL A 'BERRY' HAPPY HOLIDAY SEASON DAVE - W0ZVLA NANCY - N2ATI NATHAN - HEATHER - GARRETT</p>	<p>Seasons Greetings from "Down on The Farm" Burnham, Maine Bill + Sandy W3HQT</p>	<p>Happy Holidays DE W3FDF + Family LYNDA, DAWN + DENISE MANY GRID SQUARES IN THE NEW YEAR!</p>

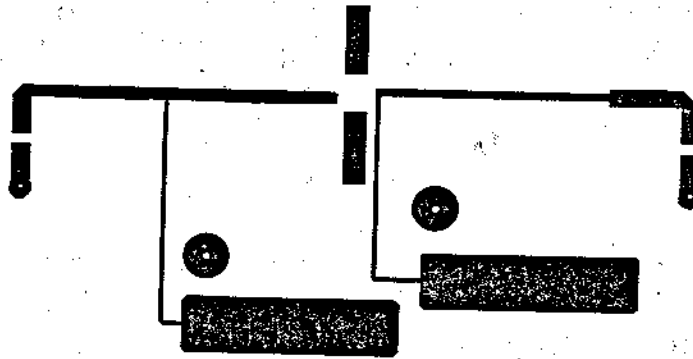
A MESSAGE FROM WB9PUJ

Grüssen aus Hong Kong! Oder Ni Hão Hong Kong - I was visiting Peking with a team from the State Dept. in re new vhf/uhf systems. Our business at Magnavox this year have been very, very good. I have only been in my office for 48 days this year - rest of the time on the road - please say hi to all the Rats & Jack.
73/88 Dick Bokern

* * *

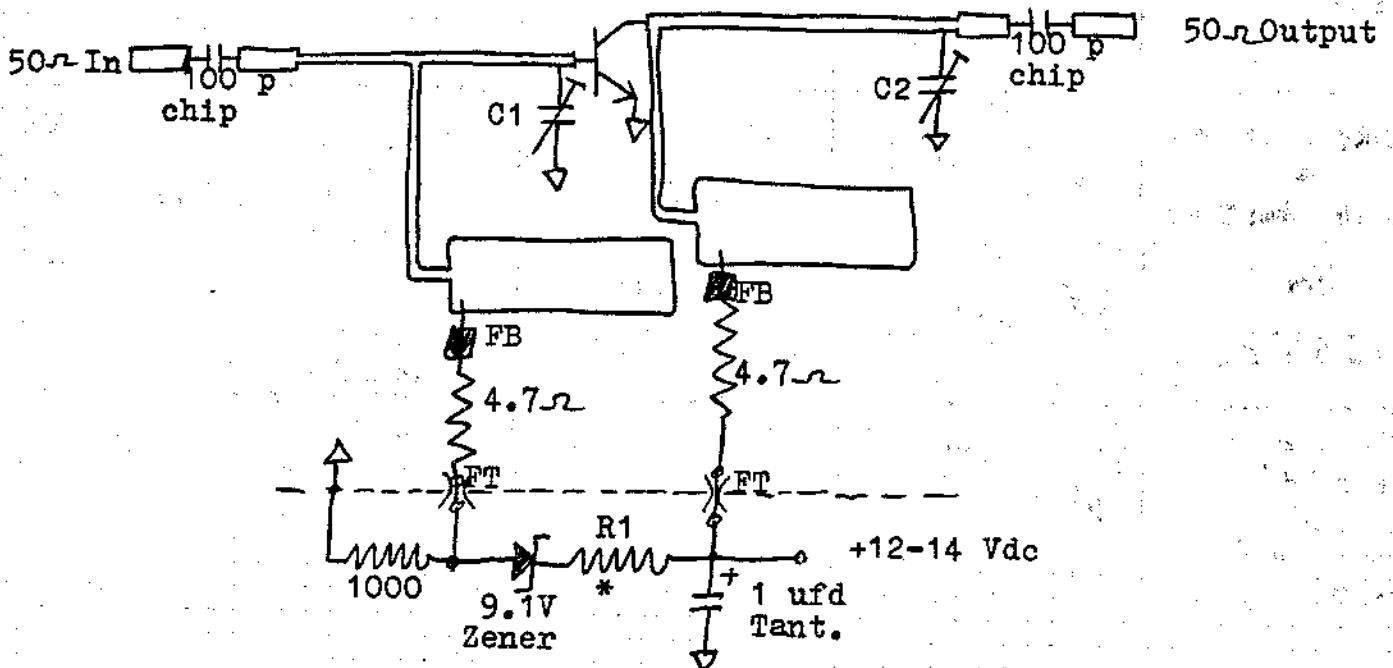
ARRL BULLETIN NR 102 FROM ARRL HEADQUARTERS NEWINGTON CT NOV. 8, 1984 TO ALL RADIO AMATEURS: FCC has granted an ARRL request for an extension of comment time on PRB1, ARRLS request for a declatory ruling preempting local zoning bodies from enacting overly restrictive antenna ordinances. The new deadline for filing is Dec. 24. The Leagues original filing and instructions for filing your comments is available from ARRL HQ for an sase with 88 cents postage. Ask for PRB1 material. Send one original and four copies of your comments to the Secretary, FCC, Washington, D.C. 20554. The first page of your comments should include the heading, Comments In Response to PRB1.

1296 Mhz. amplifier



full sized layout

Board material is 1/16" G-10 double sided



Layout is a modified MRF901 amplifier

- Q1 SD1359
- C1 0.3-3pf piston trimmer
- C2 5 pf piston trimmer

Pin 50 mw

Pout >300 mw

* Adjust R1 for Icq 70-80 ma. ($\approx 1.6K\Omega$)

 <p>HAPPY HOLIDAYS MARSHA (WASTEM), FRED, JOHN & REBECCA</p>	<p>SEASONS GREETINGS DE SYLVIA & HARRY W3CL</p>	<p>Holiday GREETINGS JO + SUSIE W2E1F</p> 	<p>Happy Holidays de MIKE W2RVX Joni K2NYF</p> 	<p>FROM MARY + JOE RUSHTON GREETINGS TO ALL W3YXF</p>
<p>HOLIDAY GREETINGS FROM Dn + Louetta K3GAS</p>	<p>SEASONS GREETINGS FROM BERT - W3TNP & ERNE - W3KKN</p>	<p>HAPPY HOLIDAYS FROM JACK - W2XU FLORENCE - W2WYE</p>	<p>SEASONS GREETINGS FRANK & Madge AK30</p>	<p>SEASON'S GREETINGS FROM THE PRIM FAMILY W3JW</p>
<p>MERRY CHRISTMAS AND HAPPY NEW YEAR TO ALL JOE W3TEC</p>	<p>SEASONS GREETINGS HARRIET AND BERT SOLTOFF K3IUV</p>	<p>HAPPY HOLIDAYS FROM LYN & SALLY W3NSI</p>	 <p>GREETINGS FROM CT. KFGA/L Steve Simons</p>	<p>Happy Holidays From Dave Hackford W3CX</p> 
<p>BEST WISHES FOR W3AJF LIVE WELL LAUGH OFTEN LOVE MUCH</p>	<p>HAPPY HOLIDAYS DE Rick & JANCE WB2NPE</p> 	<p>BEST WISHES K3DLS</p> 	<p>HAPPY HOLIDAYS GORDON & AGNES K3VYG</p>	<p>Happy Holidays Pete W33DNE</p>
<p>HOLIDAY GREETINGS FROM DON KA3MGB</p>	<p>HAPPY HOLIDAYS! DE W3AAJ JIM, PAT, SCOTT & PETE</p>	<p>HAPPY HOLIDAYS FROM GEORGE + DOLORES McMAHON</p>	<p>Happy Holidays FROM Duke & Janice Comly</p>	<p>SEASONS GREETINGS JOHN NIE - W3CNU TANNY - W00T OODLES - MEDW CAROL TOO.</p>
<p>HAPPY HOLIDAYS FROM JANICE K2CQX GENE W2RUV CHARLOTTE SHW2100 GENE W2RNGV ERRO/ K2AHM TO ALL DEARERATS</p>	<p>HAPPY HOLIDAYS FROM GUS & BARBARA K3GYS</p>	<p>GREETINGS FROM FLORIDA Tom + Sally MATTHEWS K4IJC (W3WIS)</p> 	<p>W3F2L Happy Holiday all B. H. VIVIAN & THE BOYS</p>	<p>SEASONS GREETINGS DE JANE W3DDK DAVE W3DDK JILL W3DDK SCOTT W3DDK MERRY CHRISTMAS H</p>

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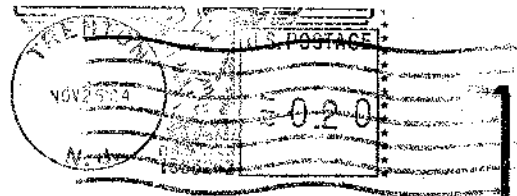
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