



**PACK RATS'**

**CHEESE**

**BITS**



**PACK RATS**

CLUB CALL: W3CCX

MT. AIRY VHF RADIO CLUB, INC.

MT. AIRY V.H.F. RADIO CLUB, INC., PHILA., PA.  
(50.2, 145.2, 221.4, 432.3 & 1296.3 MC)

AFFILIATED CLUB: AMERICAN RADIO RELAY LEAGUE

MEETINGS: THIRD WEDNESDAY OF EACH MONTH AT 8:00 P.M.

VOLUME V

DECEMBER, 1971

NUMBER 12

THE PREZ SEZ

This month our thanks must go to Marsha, the number two daughter of W3CL, Harry, for the excellent job she has been doing as our typist for Cheese Bits. Our Ex-Prez and Cheese Bits Editor once said that the hardest job he had was getting this column written, and I couldn't agree with him more, I'm no writer.

I'm sure I must have taken ten years off of Marsha's life when she receives my hand written, chicken scratched Prez Sez copy.

I never thought that some day I would be the Pack Rat Prez. It was eight years ago that I became a member, and in those days I was a carefree Pack Rat, enjoying every meeting and doing my little part as the large majority of our club members do now. You know, gang, I've belonged to many different types of clubs, held many offices, served on all kinds of committees, and have never seen any better cooperation and understanding of one another than in our Club. As I said in my first Prez Sez, we have something for everyone in our Club and we all work as a team.

I see by the calendar that the January Contest is only four weeks away. Your Contest Chairman, WA3AXV and his committee have been working very hard on material for the package. You know, gang, a lot of work goes on behind the scenes of a Contest Committee and it is up to "us", the members of the club to help them by turning in the best score we are capable of doing.

Our November Antenna program was the greatest! Man, have we got experts in our Club with experience. I know we all learned much about our antennas from 6 meters on up to 2300 MHZ. Our thanks go to W3KKN, Ernie, W2EIF, Joe, K3UJD, and K1SFF/3 for their talks.

CONTINUED

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DEADLINE FOR ARTICLES IS THE GENERAL MEMBERSHIP MEETING.

EDITOR:

K3JJZ, Elliott Weisman, ARNS  
8533 Algon Avenue  
Phila., Pa. 19152  
215 PI 2-3525

DIRECTORS:

K3JJZ, Elliott Weisman  
WA3AXV, Ron Whitsel  
W3FQD, Dick Huntzinger  
WA3LNH, Charles Benavides  
K3JJD, Mario Fontana  
K3CIV, Ralph Hersh  
(Ex-Officio)

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W3SAO, Francis Brick  
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7815 New Second Street  
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anything that is printed in  
CHEESE BITS may be reprinted,  
unless so stated, as long as  
the proper credit is given.

AWARDS CHAIRMAN:

W2EIF, Joseph Kilgore  
#5 Sunnybrook Court  
Stratford, New Jersey 08084

\*\*\*\*\*

DIRECTORS' MEETINGS ARE HELD ON THE  
SECOND WEDNESDAY OF EACH MONTH AT  
DESIGNATED LOCATIONS.

NOTICE!

Page numbering is now under  
exclusive control of Fat Rat.  
Any complaints should be  
directed to him - at your own  
risk!

MONDAY NIGHT NETS:

145.2 - 7:30 P.M.  
50.2 - 8:30 P.M.  
221.4 - 9:00 P.M.  
432.03 - 9:30 P.M.  
1296.1 - 10:00 P.M.

OFFICERS: 1971-1972

PRESIDENT: W3CJU, Don Hampton  
VICE-PRES.: K3BPP, Walt Bohlman  
TREASURER: K3GAS, Doc Cutler  
CORRES. SEC.: W3SAO, Francis Brick  
REC. SEC.: WA3BIV, Carl Barish

CALANDER OF COMING EVENTS

Syllabus by Lee-K3MXM

DECEMBER

- 1 Co-ordinator Meeting  
QTH Ron Whitsel, WA3AXV  
209 Frog Hollow Road  
Churchville, Pa.
- Envelope Stuffing, stragey and free beer.
- 8 Board of Directors Meeting, QTH - Bert Soltoff, K3IUU  
961 Warfield Lane  
Huntington Valley, Pa.  
8:00 P.M.  
Directors and interested parties invited
- 15 CLOSED CLUB MEETING -MEMBERS ONLY  
Final Contest Preparations  
Latest techniques and information will be discussed and  
evaluated. Please be prompt as there is much material  
that has to be covered and distributed.
- West Oak Lane Jewish Community Center, Thouron and Sedgwick  
Streets, Phila., Pa.  
8:00 P.M. SHARP

JANUARY

- 12 Board of Directors Meeting
- 19 The Famous Crying Towel Session - OPEN MEETING - VISITORS  
WELCOME  
No explanation is necessary. Just bring an extra  
handkerchief for wiping away those tears.  
Something new is being added to each meeting. Fifteen  
minutes will be set aside for the auctioning of better  
grade equipment and materials. Here is your chance to  
buy or sell some equipment to eager buyers.
- The silent auction will always be present at the rear of  
the room.
- Special Note from the B/D Meeting - The new club project  
will be a transistorized VFO for 6 and 2 meters. A  
prototype is being built and more details to come.

NEW PRODUCTS OF INTEREST TO HAMS

By Lyn, W3NSI

1. Digital Multimeter - Heathkit  
The new IM 102 should be available about the time this paper is in the mail. The unit, about the same size as the Heathkit Frequency Counter sells for \$229.00 from the factory and will measure up to 1000 V DC and 500 VAC, plus current to 2 amps AC & DC, and resistance to 20 megohms. Construction is all solid state with three cold cathode readout indicators.
2. 432 Mc Converter Unit. MM 432  
A communication from PAOAFN/W1 of Spectrum International informs us of a new 432 converter with a noise figure of 3.8 db and gain of 30 db. A very compact 5 1/2"x 2 3/8" x 1 1/2" size, the new job uses all American transistors including two grd emitter RF stages and a dual gate MOSFET mixer. The oscillator starts on 101 Mc (for 28 MC IF) which helps rejection of spurious signals. Other IFs are available. Price, \$59.95 - P.O. Box 87 Topsfield, Mass 01983
3. Direct Reading Capacity Meter #101  
This piece of test equipment would make a fine addition to the well stocked ham test bench. It is certainly very convenient to be able to read capacitance directly, especially when going through a pile of micas trying to find a matched pair for a filter. A range of 30 MMFD to .1 MFD is covered in 8 ranges. This item which measures 5" x 7" x 2 1/4" has a five inch meter and is all solid state, battery operated. Price, \$94.50 Lateur Eng. P.O. Box 352 San Carlos, California 94070

\* \* \* \* \*

THE PREZ SEZ CONTINUED

May I take this opportunity to wish our Pack Rats and their families a very Merry Christmas and a Happy New Year as it has been another fun year.

W3CJU, Don

# SEASONS GREETINGS



to the

## Pack Rats

FROM THE STAFF OF CHEESE BITS

K3GAS

K3JJZ

K3MXM

WA2KOI

FAT RAT

\*\*\*\*\*

SWAP SHOP

CONDUCTED BY: W3ZRR, Ray Whitehead  
7329 Shelborne Street  
Phila., Pa. 19111  
215 RA 2-4786

FOR SALE:  
Hickok Model 6000A, tube checker  
handles transistors and diodes too.  
\$50.00

16 MM Sound Movie Projector,  
Devoy model 1400 CF, \$70.00

CONTACT: Joe Farace from 8 A.M. to 4 P.M.  
OS 2-9000 X2621

FOR SALE: Realistic TRC-18  
Citizen band radio for  
automobile, 12 channels  
3 channels in 11-13-14.  
Write to JOHN CONNERS  
32 Country Lane  
Morrisville, Pa.  
Call 943-0243, \$40.00  
(needs \$15.00 work)

FOR SALE:  
Gotham Quad, 10,15,20 Meters,  
never out of box. Any reasonable  
offer.

CONTACT: W3YXF

FOR SALE: 100 Watt CW/AM  
144 MHZ. Xmitr in relay  
rack. Pair 24G final, 811  
modulator, complete with  
power supplies.  
Call ELIO COLUSSI at NARCO  
9-5 P.M. MI 3-2900  
Best offer over \$50.00

FOR SALE: New TX 6-2 with power supply and  
ARC-5 vfo. \$100.00 Firm.

CONTACT: WA2KOI, 1-609-561-6144

CONTINUED

FOR SALE: R-48 Freq. Conversion made. Still  
has FM.

CONTACT: Bill Pawson, W3VIR, 357-9234

SWAP SHOP  
CONTINUED

FOR SALE: 200 Watt CW/AM 50 MHZ  
Xmtr in 5 foot cabinet.  
High level modulation,  
continuous duty complete  
with power supplies. Speech  
clipper included, VSWR  
Bridge, fully metered.  
Stabilized ARC-5 VFO.  
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in evening or during day  
at OS 2-9000 X 2226

FOR SALE: 6M SSB Package  
Heath HW 32A Xcvr with manual  
Homebrew mixer to give 6 meter  
output. 2E 26 or 6146 Final  
with power supply  
  
Ameco Converter and power  
supply to receive 6 meters on  
HW 32A  
  
Pre-amp Attenuator, cables,  
dow-key relay included.  
Price, \$110.00

CONTACT: K3GAS, Doc Cutler  
7815 New 2nd Street  
Elkins Park, Pa. 19117  
ME 5-1078

WANTED FOR DEER HUNTING  
Pair of CB Handi Talkies  
in top operating  
condition.

CONTACT:  
John Allen, W3CXU  
at NARCO  
9 - 5 P.M.  
MI 3-2900

\*\*\*\*\*

NOTICE

Will the person that  
borrowed the 1926 ARRL  
Handbook from W3CL, please  
return same. It is  
a prized sentimental  
memento of my early days  
in ham radio.

Harry, W3CL

\*\*\*\*\*

ADDRESS CHANGE TO NEW  
MEMBERSHIP DIRECTORY

WB2NOK, Robert Jaep  
212 7th Avenue  
Haddon Heights, N.J. 08035

\*\*\*\*\*

ABCD ZCX DCX:  
E GWXBA XJXC WGB WZ XJB BKLJCGVB TCTBDM (TJENPWGX QNRDQ)  
XJWRVJX BGWRVJ WZ XJB LDSTXWVDCP EABC XW RMB EX FBFT EX LNBCG SWRD QBEGX  
HCXLJBA


XJB BAEXWD

SEASONS GREETINGS

WAZBV

SEASONS  
GREETINGS

K3GAS  
DOC & LORETTA.

 GREETINGS  
TO ALL  
PACK RATS  
FROM: WAZLVH  
CHUCK +  
MIKE & SCOTT  
BENAVIDES

SEASONS  
GREETINGS FM

SYLVIA & HARRY. W3CL  
AND UR TYPIST  
MARSHA ~

SEASONS  
GREETINGS

W3FQD  
Dick & Mary

SEASON'S  
GREETINGS

W3CYU  
LORET + CAROLE  
JOHNNIE LORETTA

SEASON'S  
GREETINGS

PAUL J. RILLING -  
WAZHT/WAZOSS

SEASONS GREETINGS

TO all our friends  
VHF SPACE NET  
WBZMTV/DIRECTOR

SEASONS  
GREETINGS

LYM  
W3NSI

SEASON'S  
GREETINGS

WAZIDQ  
WALT MIT  
LINA

K3DLS

CARL  
NOIML

SEASONS GREETINGS  
FROM

W2HF  
HERB BROWN

HAPPY  
HOLIDAYS  
WAZNGK

HARRY 3D'S ROSE

GREETINGS &  
SALUTATIONS  
W3YXF



BEST of the  
Holiday SEASON  
TO ALL

WB4 Old Red Grape  
K3ZSG  
"8.11"

SEASON'S GREETINGS  
FROM  
PHILA. AMATEUR RADIO  
EMERGENCY CORPS  
WAZHT-EC  
WAZOFF-WAZIFL-ABC  
WAZIFLWCS

Seasons Greetings  
TO all  
Susie & Jo  
W2EIF

SEASONS  
GREETINGS

WAZDJF  
CARL - ERNA

The Pack Rats and their friends did it again with ATV in color! While the group assembled, K3GAS, Doc and K3MXM. Lee passed by and passed up a fabulous evening and morning by going home to sleep like all other normal rats. The good group fueled up for the battle with hamburgers etc. and then had a very complete tour of Channel 17 and saw their lash-up from bottom to top. At least half way up the tower is a beautiful platform that would make a great field day site as there would be no "but" problem on the deck as they would all pass through the grate. The studio is next to the one tower that is west of the club meeting location, but 17 uses a tower in Roxborough. After the late late late show when the station was shut down, WA3TQI/3 Bill, used a color camera to his 8 watt (out) transmitter at 439.25 MHZ feeding an 8 over 8 J slot antenna on the control building roof.

Meanwhile, down at the K3ZKO ranch, we were able to get an excellent color picture using the fudged UHF converter method. But after blood, sweat, tears, and time to open up the band pass at the front and pre-amplifier, an excellent picture was obtained through the Motorola T44 lash up that K3ZKO, Ron demonstrated and talked on several meetings ago. The final experiment was tried in which Ron slowly rotated the antenna from the source to see if the color and picture would hold up equally well as the signal became weaker. It did; which means that the signal even meets commercial standards.

Shortly after 4:00 A.M., August 21, 1971, the tired and sleepy, but very happy group saw beautiful commercial quality color ATV using the 439.25 MHZ ATV circuit consisted of WA2TQI/3 Bill, at the camera transmitting and K3ZKO, Ron, WA2RIH, Dan, K3DLS, Carl and Mickey Mouse (no novice license yet), William James.

K3DLS.

\* \* \* \* \*

INDEPENDENT RECEIVER TUNING FOR TRANSCEIVER

Did you ever wish you could tune the receiver section of your transceiver without changing the transmitter frequency? Sure would be nice on CW for setting the tone of the station you are working, or for SSB roundtables where everyone never seems to be on the same frequency. It is extremely simple to do if you have an extra set of contacts on your TR relay in the transceiver, or room for another relay. Stability is not affected; however, the VFO must be recalibrated. Such a device has been in use here for about three years, and I would be lost without it.

Referring to the drawing, CR1 is a Varicap Diode, Motorola MV1642. It changes capacity as the voltage to it is varied (working like a variable capacitor). When transmitting, the diode is given a steady voltage from



MEMBERS ONLY

(8A)

DE OWHN

It has come to my attention that my recent article has upset many of you. Good! / Bad? Let us set the record straight. I am not trying to "tear the club apart." I am trying to get some of you off your . . . and into the thick of things. I may be guilty of gross exaggeration but no more.

Activity is down -- Monday night football may be a contributing factor.

There seems to be a roaring lack of interest in the club project, no matter what it may be. Why??

As far as meetings go -- notice the guys standing and/or sitting around the back of the room jawing at the next meeting.

This paper certainly isn't "Life." In the November issue (with the exception of the Prez Sez) there were only two articles other than this one by members. Why? There are over seventy active? members in the club.

\$\$\$\$\$ -- About two years ago the club was about to pull a Penn Central -- or so they (the officers and directors) said. So we agreed to raise the dues two dollars per member. The cost of living has gone up about 10% since the increase. The increase produced a maximum of \$300 by my calculations. We now have about five hundred dollars in the treasury and its almost the end of the year. This makes me think we were sold a bill of goods. I believe someone goofed in their forecast and honestly hope it won't happen again.

June QSO Party - we came in 5th. Why? Where did we go wrong? I wasn't there. (Maybe thats where we went wrong?) (hi) I have heard various reasons for our failure. It comes down to the fact that we did not work enough stations. The top scorer made over two hundred more contact than we did. And they were in Western Mass. WHY?

Clique - I believe I used the wrong word. I used Clique because that is what it is commonly known as. However, after referring to Webster, I will not refer to it as the synergism (look it up, then we'll both have learned a new word).

And finally, to those of you who I really bugged, I refer you to Winston Churchill's speech of January, 1941:

"I do not resent criticism, even when, for the sake of emphasis, it parts for the time with reality."

Old What's His Name

(You're still nuts if you think I'm going to say who!)

DEAR O.W.H.N.

I've kept quiet long enough. It is now time to put you in your place.

- 1. V.H.F. activity in general has decreased not only that of the pack rats.
- 2. Would you care to count how many of the club project 432 converters are on the air. Ask the 432 net control what a difference the club project made in his operation.
- 3. Contest -- I can only speak for myself, but if it weren't for January V.H.F. contest, I doubt if my gear would ever be in first class shape.
- 4. Newspaper -- Low blow indeed. Be aware O.W.H.N. that there are at least six people involved with the newspaper. If communication breaks down at any stage, you can have page 10 appearing before page 7.
- 5. Treasury -- Be aware the dues were raised prior to the invitation of business card ad's. The success of K3MXM's program would have been extremely difficult to predict.
- 6. Finally, June Contest -- As I said last issue, show us how it's done.

I am willing to sign my name!

K3JJZ, Elliott Weisman  
Editor Cheese Bits

\*\*\*\*\*

YOU AIN'T HEARD NOTHING YET

De The Grouch

Hey Joe, did you read that piece in Cheese Bits last month? That guy's OK! He doesn't know what he's talking about, but he's OK. Why at least ten guys checked into Harry's net Monday night. Remember when the six meter net used to run till nine forty-five to ten o'clock, then we had the Nit Wit Net after that. I checked in and out tho, it was a good football game. But getting back to that nut, I got a kick out of his nerve. He talks about the contest. Face it. If it weren't for the January and June contest I'd probably never get on the air, but with getting the rigs set up it keeps me active. As far as where we placed in June -- well that happens every once in a while -- I don't know what went wrong and I'm not about to blame someone for it, but heck we better do better next year! I must admit he's right about the crying towel meeting. It is funny. But at least we can laugh at ourselves.

YOU AIN'T HEARD NOTHING YET  
CONTINUED

other meetings are OK too. Ya, a couple of the guys tend to get a little long winded when they get up there, but those guys know what they're talking about and who am I to complain about someone being long winded, even though sometimes I am dying to get to that coffee.

As far as the directors are concerned, I'm not worried. As long as they have money they won't ask for another dues raise. But hey, that's an idea! Why doesn't O.W.H.N. run for Prez and promise to lower the dues -- he's bound to get elected and boy would he shake those guys up. I didn't like that cheap shot about the clique. I never had any trouble breaking in--all I had to do was volunteer and they made me chairman. Ha! Ha!

I sort of agree with him about the club project. We had a 2 meter converter and it went over perty good, the 432 converter is still in the box tho. Someday, I'll get to it. I hear they're going to have a VFO this time. Hope it's stable on 220. I need one there. But I'm not the problem, I'd probably buy anything they came out with. What about you? Aw, you can always use another VFO. A FET converter for 2? Not a bad idea. You could use something to replace those 417A's. Maybe next time, but open your big mouth, let 'em know what you want, but don't complain to me, I didn't see you raise your hand when they asked for suggestions.

Oh well, hit the cat with a bell. I ain't saying nothing about the paper. As long as the editor prints my stuff, he's OK with me.

Well, that's enough for tonight. Ya know, I still think it's dumb. What are we -- a mile apart? I'm running a gallon and you three fifths. We're both nuts. 10 - 4 !

The Grouch

\*\*\*\*\*

De The Editor

Well, now it seems that the last issue of Cheese Bits created a little bit of turmoil. Little bit I guess is an understatement. Your editor for the most part has avoided a strict editorial policy in determining the content of the paper.

Several general statements may be used to define the current editorial policy.

1. Cheese Bits exists primarily for the good of the club, all other functions and purposes are secondary.

CONTINUED

De The Editor  
CONTINUED

2. Anything written by a member in good standing will be printed, even though it might be edited or abbreviated. At the base of this article is a short questionnaire. Please fill out and return to the editor either by mail or at the next meeting. You need not sign your name or call since this page is being distributed to members only!

\*\*\*\*\*

K3JJZ, Elliott Weisman  
8533 Algon Avenue  
Phila., Pa. 19152

NAME _____	CALL _____	(OPTIONAL)	
		T	F
1. I believe O.W.H.N. type articles should be printed in Cheese Bits		___	___
2. I believe the book review articles should be discontinued		___	___
3. I believe Cheese Bits should include minutes of the directors meetings.		___	___
4. I believe Cheese Bits should discontinue paid advertising.		___	___
5. I believe Cheese Bits should contain more photos and fewer articles.		___	___
6. I believe the editor should consider the impression Cheese Bits makes on non-members and exchange clubs before accepting an article for publication.		___	___
7. I would like to see more construction articles.		___	___
8. I would like to write an article for the paper but do not know how to go about it.		___	___
9. My XYL reads cheese bits.		___	___
10. After I finish with my copy I pass it on to someone else to read.		___	___
11. I believe content of the paper should be determined by an editorial board rather than the editor alone.		___	___
12. This space provided for any additional comments.			



**MT. AIRY V.H.F. RADIO CLUB, INC.**

**RAT**

A Request From Your Ad Manager

Please tell our advertisers you saw their ad in CHEESEBITS or better yet, leave them your QSL card. There are some who disbelieve that CHEESEBITS is not the best read and circulated local radio club newspaper.

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①

INDEPENDENT RECEIVER TUNING FOR TRANSCEIVER  
CONTINUED

the voltage divider R1, R2, R3, R4. When in receive, the potentiometer R5 is supplying the voltage to the varicap. With R5 in the center of its range, the control voltage is about the same as in transmit, so there will be no offset. Moving R5 above or below center will tune the receiver plus or minus from the transmitter frequency. Switch S1 bypasses the offset control and allows normal transceiver operation.

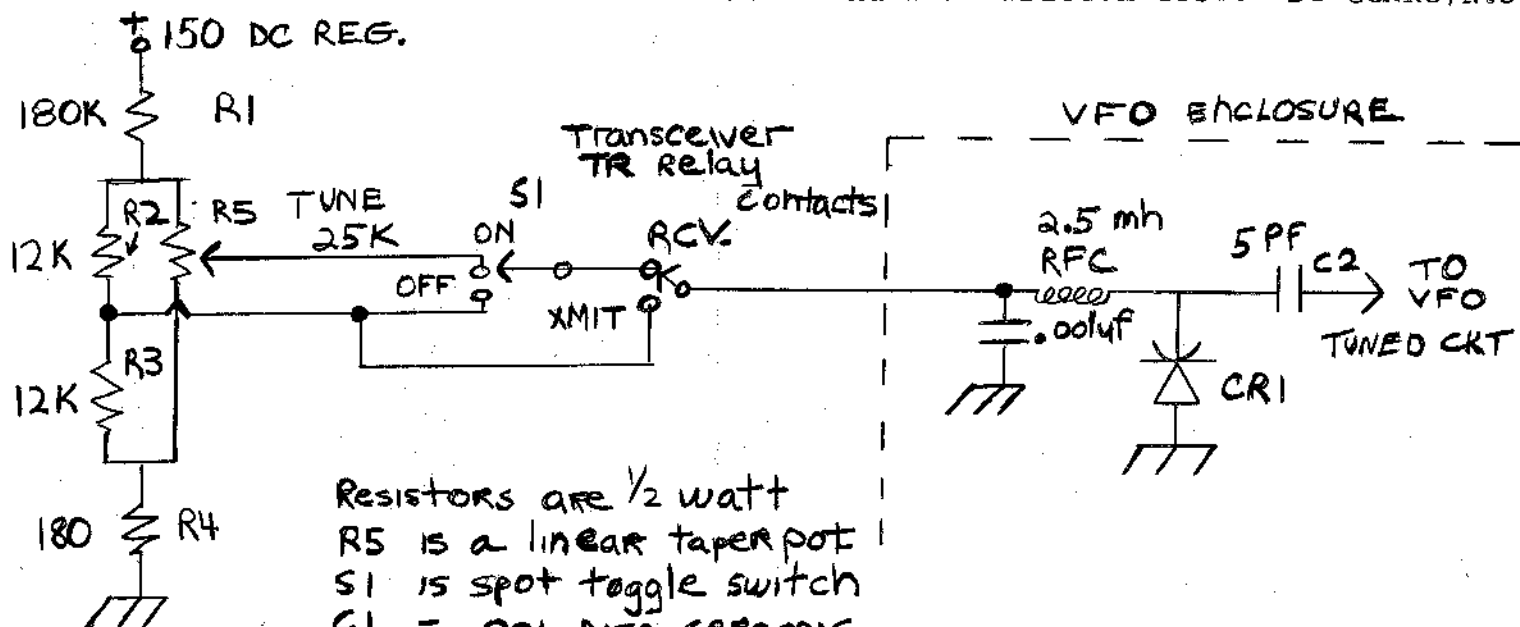
C1, C2, RFC1, and CR1 should be mounted inside the VFO enclosure. The other components can be anywhere, including a separate box outside the transceiver. Recalibrate the VFO with the switch in the off position. As shown, the offset is about 2Kc. If you want more offset control, change C2 to 10PF.

Parts, including the varicap, should be available from Resco in Camden. Call ahead and have them brought in from the warehouse if not in stock.

I hope receiver offset will increase your operating enjoyment as much as it has mine. Cost is \$6 or \$7 if all parts are new.

73, W2FBF

Ed. Note - A real worthwhile idea Ken - and well written too!! De GCARC, N.J.



- Resistors are 1/2 watt  
 R5 is a linear taper pot  
 S1 is spot toggle switch  
 C1 - .001 DISC CERAMIC  
 C2 - 5PF SILVERED MICA  
 CR1 - MOTOROLA MV1642 OR HUGHES 1N954  
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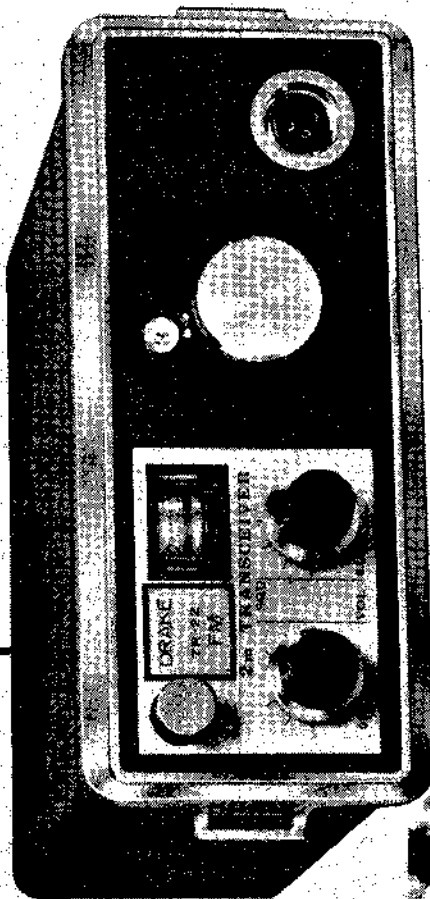


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