THE WEST RAND AMATEUR RADIO CLUB

January 2004
Volume 4, Issue 6

ANODE

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Editor's Comments

January 2004

Sorry people, the Anode this month is going to be a short one. Time and events conspired to make it a 'busy' holiday this year.

New year's Resolutions

It was a peaceful Christmas with only the moaning of pedestrians to disturb the peace. There are less of them now. Pedestrian's managed to wipe out many drivers this holiday season.

Spam, Spam, Spam, Spam, Spam, Spam, Spam, Spam, Spam..... ...[Monty Python]

Despite the addition of an email scanner / spam killer, I am getting more spam this month than ever before. So if you have any input material for the Anode, please mark the subject clearly for the Anode.

With the rumble in the distance the line was dropped.

With all the rain we haven't had.....

Got a Kantronics TNC?

[taken from the amateur radio newsgroups]
"Stuart Blake Tener" <stuart@misty.com> wrote in message news:e9ab505e.0401081706.17b155b6@posting.google.com...
To whom it shall concern:

I am interested in finding out what upgrades were/are available for the KAM. I am well

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Reproduction Crystal Set

by R.F. Graham

In the early days of radio crystal sets were used in many homes, and this project is a reproduction of such a receiver. Variable capacitors *were* available for tuning, but their cost often resulted in some other means of tuning such as tapped coils, coils with sliding contacts bearing on the turns and swinging coils where mutual coupling (and hence the inductance and resonant frequency) could be adjusted.

In addition to the headphones, such receivers required only a few components such as terminals, a detector crystal and "cats whisker", wire to wind the coils, an insulated board or panel and a few small parts such, as bolts and brackets to make a detector assembly.
The receiver shown here is something of a novelty, and sure, to arouse interest when it is seen.

COILS

These are a flat type quite popular in the early days, and wound with 26 s.w.g. cotton-covered wire. Actually, any silk covered or enamelled wire, from 30 s.w.g. to 24 s.w.g. is suitable. If heavier wire is used then larger discs will be required.

Each disc is about 4in. in diameter, and can be stout cardboard or thin paxolin sheet. Seven slots, each about 18in. wide, are cut

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Special points of interest:

- Contact details on back page

Editor's Comments

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aware of Kantronics' arrogant position of not supporting the hardware anymore which is part of my station.

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Version history is available fm Kantronics at this web address: http://www.kantronics.com/ver_hist.htm

73
Richard WB8KRN

From: "Hamhtr" <hamhtr@aol.com>
Subject: Re: KAM TNC
Date: 2004-01-09 19:24

Hams abandoned Kantronics long before Kantronics abandoned the hams. Cheap hams decided that sound card software was better than a box, and that caused so many company's, like AEA, to go out of business.

You'll never see another ham based TNC, since hams think that poorly written soundcard software that is free is better than an external box with it's own processing.

Morons.

From: "Joseph Fenn" <jfenn@lava.net>
Subject: Re: KAM TNC
Date: 2004-01-09 21:22

Ref TNC's vs Soundcard stuff. Many seem to have forgotten that none of the soundcard stuff is actually CRC (cyclic redundancy Checksum).

Or "ARQ" automatic error correction. This is a prime necessity for digital message traffic. So a message originated by someone can be guaranteed it will arrive at destination error free no matter how many gateways or bbs it passes through enroute to destination.

Joe/ABM6JF/KH6JF

****
Ham KH6JF AARS/MARS ABM6JF QCWA WW2 VET WD RADIO *
****

HAM RADIO HISTORY -- THE FIRST BIG REPEATER MEETING

Many hams are not aware that back in the early 1970's repeater growth and continued experimentation in ham radio relay communication came to a screeching halt. This, as the result of overly restrictive regulations on the part of the FCC.

As most radio amateurs of that era knew, this was not a good time to be the owner of a repeater unless you also held an Electronics Engineering degree. Things had to change if F-M and repeaters were to grow again. In the end, one man risked it all to make it happen.

On January 24, 1974 then 73 Magazine publisher Wayne Green, W2NSD, brought a group of prominent "repeater people" before the FCC. He had arranged the meeting in an attempt to convince the Commissioners to roll back the restrictions put in place as a result of Docket 18803. Here's a sample of what that meeting sounded like:

Want to hear more? Well, over the next several months you can take a trip back in time to join Wayne Green, W2NSD, former Colorado's Marshal Quiat, AG0X, New York's Howard Lester W2ODC and Dick McKay, K6VGP, from California. This, as they and others go to Washington D-C -- to -- quite literally -- set repeaters free.

Part 1 of the audio of that meeting is on our website as a Newsline Extra. In it you will meet the hams, who travelled to Washington to speak on behalf of the nations FM and repeater community. You will also hear some of the presentations made by them. Its on line now at our f-t-p site at www.arnewsline.org forward slash quincy.

(ARNewsline(tm))

JB

Reproduction Crystal Set

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about 1in. deep.

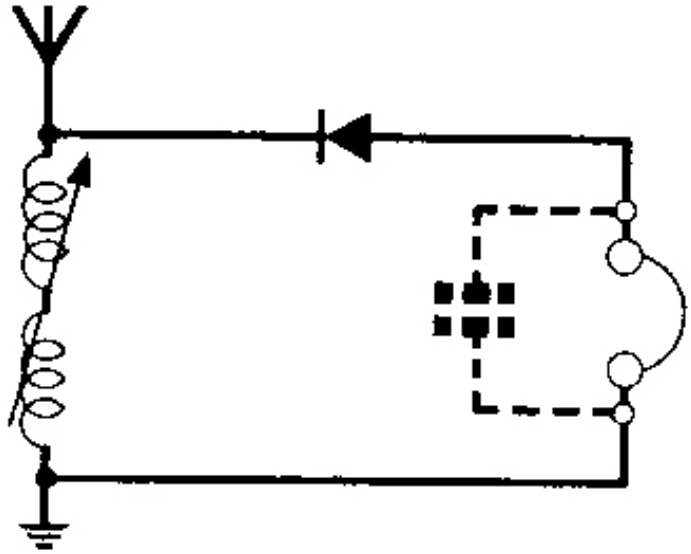
Pass the wire through two small holes, and wind in and out of each slot in turn, as winding progresses. This results in half the turns lying on one face of the disc, and half on the other face, crossing over in the slots. Each coil has about 40 turns, the wire being finally anchored through two small holes, leaving the ends long enough to reach to the terminals.

With such a circuit, the parallel capacitance is mainly due to that of the aerial and earth. As a matter of interest, "tuning" coverage was tested with a signal generator, and was 1300-1700kHz with a 25pF aerial/earth system, 850-1100kHz with 100pF, and 550-750kHz with the aerial/earth placing about 250pF across the receiver.

With such a receiver it was quite usual to adjust the number of turns to suit the aerial, or wavelength of local stations.

One coil is fixed on a small bracket. The other is bolted to a strip of material about 1in. long, secured to a threaded rod by lock-nuts. The rod runs in two brackets, and is rotated by a large terminal head or small knob. "Tuning" is accomplished by swinging one coil over the other thus varying the effective inductance.

The base is varnished plywood or ebonite or paxolin about 6X6 in. Strips raise it about 34in. to clear the terminals projecting underneath.



It could hardly be more simple! The suggested additional 'condenser' shown dotted can be about 1000pF. It will be cheaper to buy it rather than to follow the method described in the text for making a 'condenser'!

DETECTOR.

A strip of brass about 1 X 3/8in. (from an old lamp battery) is bolted to hold the crystal firmly, a corner or point on the latter projecting up through a hole in the strip.

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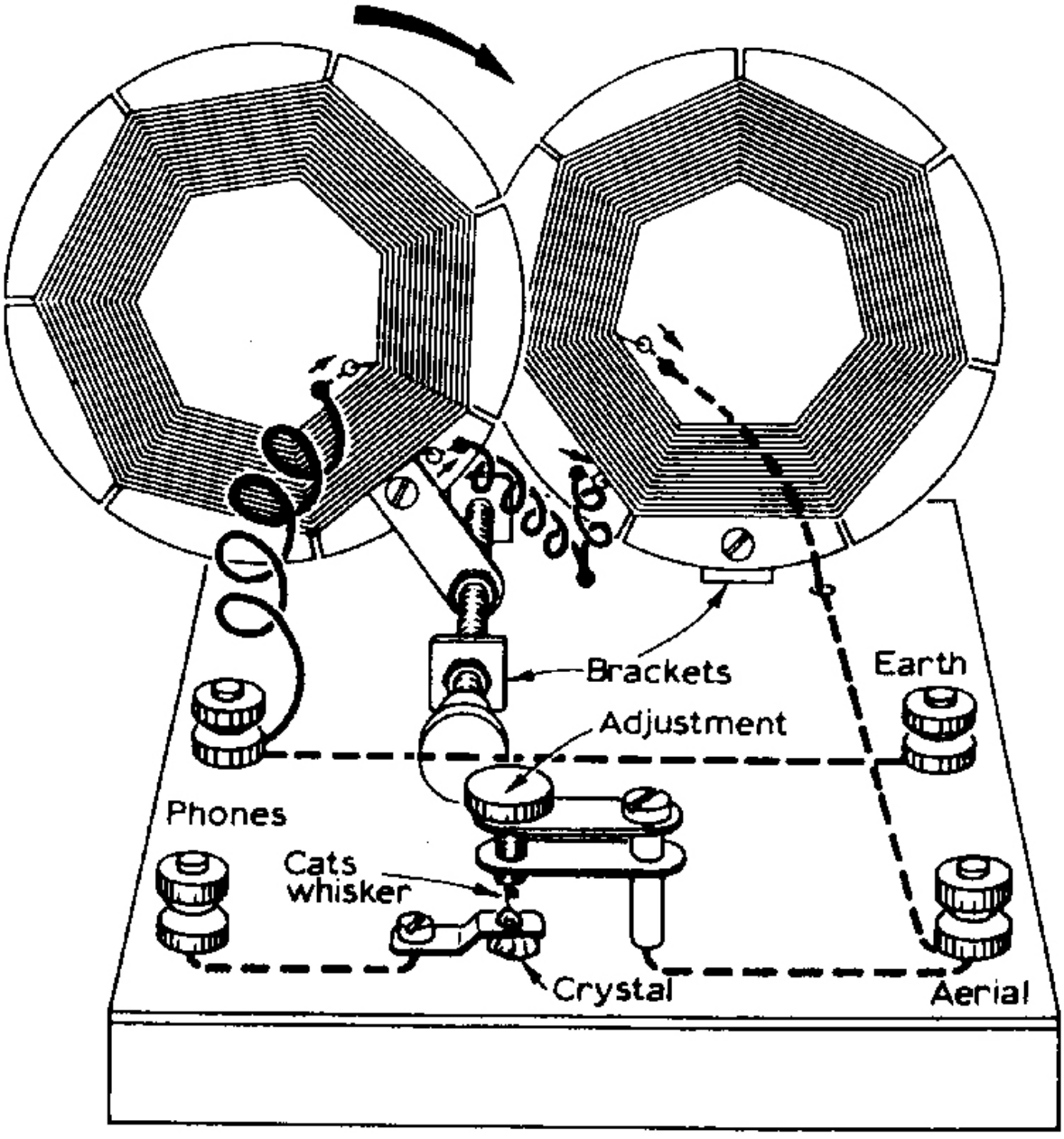
Reproduction Crystal Set



This drawing, showing the constructional details of the crystal set, should not be difficult to follow.

Reproduction Crystal Set

(Continued from page 3)

A 11/2in. bolt with spacers holds a similar strip about 11/4in. long to which the cats whisker is soldered. Above this strip is a stouter strip of metal, and a screw or terminal head runs through a threaded hole in this, or through a nut soldered to it. Turning this screw or terminal adjusts pressure of the cats whisker on the crystal.
The cats whisker is made by winding about 11/2 inches of copper, tinned-copper or brass wire, about 34 s.w.g., on a small drill about 1/8 in. diameter and then stretching the winding slightly. These bygone detectors used wonderful combinations of crystals and even gold-tipped whiskers, all of which appeared to give about the same result. There is great room for experiment here, using various kinds of wire, or soldering the crystal (use Woods metal) or packing it with metal foil. All these trials will probably give a detector of about equal efficiency to that shown, which is about the same as a modern crystal-diode, when a sensitive spot on the crystal has been found.

AERIAL AND EARTH

The aerial ought to be at least 25ft long, and preferably over 50ft. Maximum range is usually considered to be about 25 to 150 miles from a major transmitter, anything over about 50 miles generally needing some 50-100ft or so of outside aerial, 20ft or more high.
The earth lead runs to a metal spike or other earth rod in damp soil. With a 180 foot aerial ample volume was obtained by the author some 25 miles from a transmitter. No earth was used but the earth is usually desirable.

The headphones ought to be good-quality, sensitive headsets of about 500 Ohms to 2,000 Ohms resistance, so as to give best volume with the rather limited output of the crystal set. Strictly speaking, a capacitor of about 1,000pF should be connected across the headphones but it was not always fitted in the early days. A description of how to make such a "telephone condenser" appeared in "Amateur Wireless in 1922.

"The telephone condenser is made up of twenty-five small sheets of tinfoil measuring 1 1/2in. by 34 in. with a small strip left at one corner to make a lug. It is built up by placing the strips of tinfoil, with strips of waxed paper in between, with the lugs alternately at one end and then at the other. When the condenser has been built up the ends of the tinfoil should be carefully soldered together by means of a blob of solder, two pieces of cardboard being placed either side of the condenser and a length of linen tape wound round to keep the whole together. The condenser should then be immersed in molten paraffin and allowed to set in a solid block."

The "components list is short and sweet! One galena crystal (ref. X6), four 4BA brass terminals, 2oz. reel of 26 s.w. g. enamelled wire and a length of 4BA brass studding, all of which are obtainable from Home Radio in Mitcham) as a "kit for 96p which includes post and packing.

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Bulletins (Sundays at …)
11h15 Start call in of stations
11h30 Main bulletin start

Frequencies
439.000MHz 7.6MHz split
(West Rand Repeater)
145,625 MHz (West Rand Repeater)
10,135 MHz (HF Relay)

Radio Amateurs do it with more frequency!

Chairman/Treasurer	Dave	ZR6AOC	475 0566 (H)	zr6aoc@mweb.co.za
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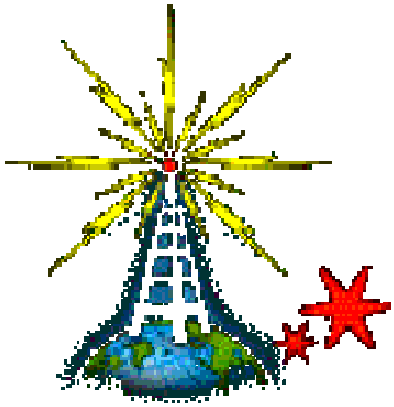
West Rand members - we need your input!

To make this the best ham radio magazine in South Africa we need your input. Please submit articles, comments, suggestions etc.

Please send plain text with no formatting to the email address below.

In July 2003, we re-published an Anode Compendium on CD. It has the issues from July 2000 until June this year. This included the new Adobe reader. It has been updated, check with the chairman for details.



We need your input! Email us articles, comments and suggestions please.
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