
Anode

Volume 3 Issue 1

March 1996

From the Editor's pen....

A NODE is alive and well as you can see. My track record for 1996 has not been as good as I would have liked; first the delays in publishing ANODE and then I seem to have misplaced the Birthday Book !! Lets hope that the remaining three quarters are better than the first quarter. Anyway the good news is that the Branch's affairs are in good order. The finances have been converted to Quick Books which means that the Year End Accounts will be available pretty soon after the year end. Secondly, Eric ZR6ABP is doing sterling work as Branch Secretary with the minutes faithfully kept and distributed timeously.

Looking at this edition, most of it is devoted to Branch News with the regular construction article being supplied by Tim ZS5BID. He assures me that all his submissions work; both experienced and novice constructors should therefore have little difficulty in building working projects from those appearing in ANODE. The balance of this publication is news of a more general nature.

After the long break from publishing ANODE, one needs to take a look back over what has transpired over the past few months. We seem to have got started

Why not use a "cell" phone instead !!

later in 1996 than is usual for the Christmas break. Nevertheless, the Branch still seems to accomplish what it sets itself out to do. The VHF/UHF Contest has come and gone. Derrick ZS6DDG will feature high in the scorings as a result of his good station located at/near Warden. ZS6JQ operating from home will also give some more points towards the Branch Participation Trophy. September will see us taking the Club Station out again when we hope to pick up "lost" scores from March. The SARL AGM has likewise come and gone with little excitement despite the hype seen on the packet network (at least) in the run up before the meeting. The upshot of this is that we will shortly be called upon to vote in a new structure for the Radio League. More about that however in the next edition of ANODE. The next big operation we can look forward to is the SARL HF Field Day Contest which will more than likely be held later this year in June. As before more specific details in the next ANODE although there is a short paragraph in this edition about some special requirements the organisers need.

Other than the above and not wishing to pre-empt the remaining articles, let me close this column and get down to the rest of the publication.

73 de Cedar; ZS6JQ

Social activities highlighted for the Branch

It has been some time since the Branch last had a social outing for the whole family away from the hustle and bustle of the clubhouse and boot sales. Thursday nights committee meeting agreed that we should hold a number of social outings away from the immediate environs of the club. It was first suggested that we go to Robinson Lake in Randfontein as a overnight camp/caravan outing. However, before we commit to spending too much money, it was rather suggested that we hold an afternoon braai and get together at a Lapa at Florida Lake. Now that the rainy season is over, we can

comfortably spend the day in the sun or shade secure in the knowledge that we should not get rained out as has occurred in the past. (however, with our luck, it will rain that day !!) Nevertheless Johan ZS6JVV undertook the task of setting the date and organising this event. Listen out for more details in future bulletins.

West Rand Branch Boot sale date announced

After much deliberation and pressure from members, guests and other radio amateurs, the date for the next Branch Boot Sale has finally been selected. The Committee feels that Saturday 25 May is an ideal date for the first Boot Sale of 1996. This date was selected due to many activities occurring between now and May. It also leaves us with enough time to organise the next "Oktoberfest" which we must naturally hold in October. Members will remember what a great success that day's events were. It certainly became the benchmark against which to judge all other similar events. Dave Lloyd is handling the catering for that day and he assures us that whilst the usual "boot sale" fare of Boerewors rolls will be offered, he is also looking to supply curry and rice as well as a variety of pasta dishes. Steven ZR6SJK was unsuccessful in persuading Dave to prepare a sheep spit Braai although he did reluctantly agree to consider one for the Oktoberfest.

The success of Amateur Radio lies in attracting younger members

Tim ZS6BID in his capacity as vice-chairman stood in for Sarel at this last committee meeting. He raised a most important issue and that related to attracting new members to the hobby. Naturally this provoked much debate as to how best to do this. Cedar tried to explain the principles behind the "ARISAS" programme (Amateur Radio Instruction in South African Schools). It was acknowledged that without active support from a dedicated teacher, one would have little success in involving scholars in an amateur radio environment. Nevertheless, the committee agrees that we must try to get new younger members involved. With this in mind Tim will be approaching one or two local Scout Groups to see if we could not establish a working relationship with them with the view to helping them to obtain their licence.

Field Day arrangements still going full steam ahead

Despite the date for the 1996 HF Field Day still to be announced, preparations for the Branch's participation in the event are progressing at full steam. Tim and Keith are hard at work designing the antenna system to be used and are looking for ideas or other offers of assistance especially when it comes to antenna support poles. Specifically they are looking for four 18 meter poles on which to mount the antennas. If you have any ideas where these can be sourced from please contact either of them. Manpower for the station is desperately needed and here we are looking for 6 to 10 members to assist in the myriad of tasks which need to be done in manning a large outdoor station. We need operators, cooks, general assistants as well as a team to attend to the logging activities as we intend to undertake the completion of the logs at the site before we leave on the Sunday afternoon. Seeing that we will be operating from the Randfontein/Carltonville area, it should be a simple matter to spend either the Friday or Saturday night at the site. As indicated earlier, please contact either Tim or Keith if you would like to help in running or erecting this station.

Amateur Radio awareness programme to commence shortly

Following on somewhat from an earlier item. Wally suggested that we consider operating a VHF and HF radio site in a prominent location to give the "lay" public an insight into Amateur Radio. After some discussion he undertook to contact the management of Hillfox Power Centre to see if we could not run a station from their parking area on the first Saturday of each month from around 09:00 to about 14:30. If this is not successful, then the management of other centres in the vicinity will be approached.

Science Fun Day; an opportunity to demonstrate the many facets of Amateur Radio

Every year (where possible,) the University of the Witwatersrand holds a science fun day and this years event will be held on Saturday 14 May. The West Rand Branch has been asked to provide the amateur radio exhibits with Cedar ZS6JQ co-ordinating this years display. At present it is planned to run an HF and VHF station, some QRP equipment as well as demonstrating packet radio and satellite operation. If your interests encompass any of these modes (or even SSTV/RTTY) please call Cedar to arrange your participation.

Constructor's Trophy

Don't forget that the Branch AGM is rapidly approaching and that the Constructors trophy will be awarded as part of the days activities. There are two categories being offered: the Advanced and Standard categories which gives all members the opportunity to participate. Why not start with your project this week end to ensure that it is ready for Saturday 6 July when we expect to hold the AGM. It is always a problem to find circuits which are suitable for submission in this event. Why not use the circuits published by Tim as ones to construct and submit. At least you can be assured of getting a item which works; the same cannot always be said for commercial circuits. Remember that the prizes to be won will be the 1996 (THE LATEST) ARRL Handbook which alone makes it worthwhile to enter. Here's hoping that we get many entrants in the competition.

Sunday Bulletin Format

Those of you who listen to the weekly Sunday Bulletin will no doubt be puzzled by the change in format. This has been done to allow Marc ZS6MGD to present his TechNet programme on both 2 meters as well as HF. We have also been experimenting with different formats within the bulletin itself. As of now it seems as if the HQ Bulletin will be broadcast first, followed by Branch news and then Swop Shop. The HAMNET Bulletin was previously transmitted at 11:00. However it seems as if we can get also get this into the "main" programme as well which means that all the various interests of the Branch can be catered for in the weekly bulletin. BUT, when all is done, the bulletin is really aimed at the listeners and not there for the presenters !! If you are not happy with the "new" format, the programme content or dare we say it, the time of presentation, please contact Cedar with your suggestions.

SHORT CIRCUIT

by Tim Stanley ZS6BID

As the name of this column implies, we will be submitting for our members a circuit in every issue of Anode. The idea is simple. I draw 'em and you build 'em. As the circuits presented here will have been tested and developed, this should help keep the influences of OM Murphy to a minimum. Bear in mind that home construction IS NOT DIFFICULT. If I can, then you can, just as easily. Home construction of electronic circuits is the ONLY hobby that gets less expensive as time goes by. (try thinking of another one). In addition to the above, it supplies gallons of self-satisfaction, and can earn you mega- Brownie points with the XYL/YL or lover if you're lucky enough to have one. If you have a problem getting the dang thing to fire on all cylinders, you can always give me a call, and I will try to help you. I will be putting out circuits of test equipment, power supplies and the like, to help troubleshooting. The assumption will be that the constructor has the minimum of equipment at his or her disposal. If your XYL has a 100MHz, 8 channel scope in the kitchen, so much the better, but it really isn't necessary. The circuits will probably not be in the order you would like them, but hang in there. Chances are, something you need will pop up. So without further ado....

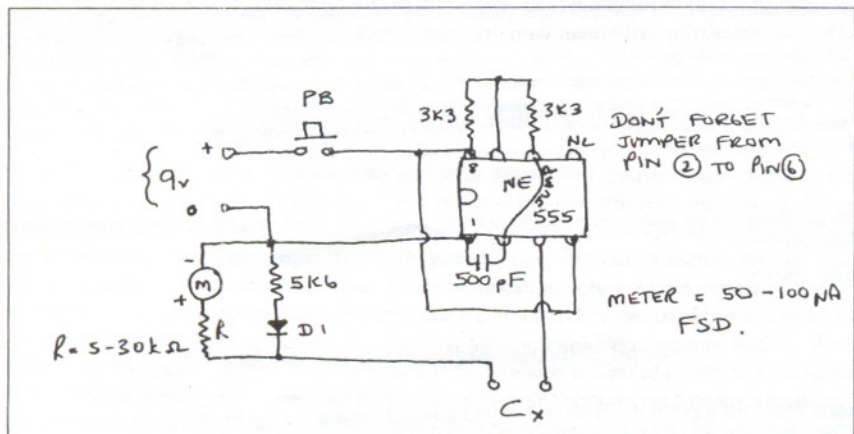
CIRCUIT No. 1 THE G3NWT CAPACITANCE METER

OM Geoff G3NWT sadly went silent key recently. Here was a brilliant mind that could design something to speed up the rotation of the earth using two 741 op amps. Thanks very much Geoff.

It is difficult, expensive, and also very useful to be able to measure small capacitors accurately. This circuit does just that. It will measure from 0 to 100 pF on a 0 to 100 mA meter.

The circuit is so simple that it can be wired directly onto the terminals of the meter. Do use a socket for the NE555 IC. As the current drawn is of some consequence, a push-button is used.

The meter I used was a 0-100 mA meter, with resistor R adjusted for correct reading on the meter, (20-30 kilo-ohms) using a known 1% accurate capacitor. Do not use long leads when connecting the unknown capacitance to the finished Capacitance meter. This will introduce additional unwanted "stray" capacity which



will throw your reading off. The diode can be any small silicone diode. The cap you wish to measure is connected across the points marked Cx. The PP3 9 volt battery is connected to + and - OBSERVE CORRECT POLARITY.

The circuit should be put into a small plastic box. You can then use two short lengths of brass tubing as the two contacts for Cx. Space them about 10 mm apart, and you can then plug in the capacitor to be measured, press the button, and read off the value on the meter.