ANODE

Volume 6 Issue 1 **June 1995**

From the Chairman's Desk.....

What a way to start the month of June!! Rather like "Jaws" "...just when you thought it safe to go back into the water..." What else can go wrong ? Firstly, the bane of all editors of technical journals; an article is published and then lo and behold the very next month an, update/correction to it !! This is exactly what happened with the power supply reproduced from the Port Elizabeth Branch Newsletter. However, you will see elsewhere in this edition the necessary correction. The second "wheels off" came with the VHF simplex evening on Sunday night. Guess what, not one participant. Oh well, I took the opportunity to polish shoes in readiness for the following week.

The biggest disaster to hit us was the break-in to the clubhouse this last week-end. You can imagine the shock when I opened the clubhouse on preparation for the Friday get together and I found the security gate and wooden door broken. The scene inside the clubroom was likewise not too pleasant to look at. Luckily the inside gate held despite obvious attempts to pry it open. The monetary losses were contained to the microwave oven; the balance of the items stolen were donated to us. In particular, the AVO valve tester and some other museum items, the FM tuner, speakers, amplifier, tea/coffee machine and kettle. However, a number of our trophies were also stolen. Including the SARL Neil Efficiency Trophy won a few years ago. This has, of course, no value whatsoever and will probably be dumped.

Some benefit has come out of this in that the security has been substantially improved around the access of the clubhouse. Many thanks must go to Brian Burger, Dave Cloete, Ghys du Plessis and John Murdoch for the work which they put in on the Saturday.

Like all editions, this one must come to an end. Your next ANODE will be published under the auspices of the new committee which will be elected at the Branch Annual General Meeting to be held on 8 July where we are hoping for a ***BIG*** turnout. See you then.

73 de Cedar

HAMNET Readiness.... from another perspective.

The article which appears below has been extracted from the ZS6AI bulletin board system and concerns the actions taken by the Hams of Oklahoma City to provide assistance to the civil authorities at the time of the bombing of the Government building in that city some weeks ago. It was interesting to read but more so the message behind the written word. Their ARRL publicity officer did a good job in spreading the word around on exactly what the Hams can and did do. Also, the pre-planning which went into the operation. Only with such attention to detail before the event can one guarantee success when disaster strikes.

".....The April 19th bombing of the federal building in Oklahoma City, Oklahoma shocked Americans like no event has ever before. The heavy loss of life, 168 people, and the emotional rescue effort drew worldwide attention. Among the people helping put lives and affairs back in order after the blast were amateur radio operators. We have a special report on the role hams played after the bombing.

Tornadoes, severe thunderstorms, that's what Oklahoma is used to dealing with. For amateur radio operators in the state, emergency communications usually means operating nets to assist with severe weather spotting and damage recovery. But April 19th brought a new sense of reality. A new sense of understanding about what disaster can mean.

While Americans stared in disbelief at the live video of flames, damage and crying children being carried by fire fighters. Oklahoma hams didn't wait for someone to ask for help.

"I would say it was self activation. A lot of people heard the explosion." Tom Webb, WA9AFM

Tom Webb, WA9AFM is the ARRL Public Information Officer in Oklahoma.

"A lot of our local hams tend to monitor 22/82, which is the primary frequency. And it was essentially everyone realized something was wrong and monitored. Once we received official word, which was about 15 to 20 minutes after the blast, we officially activated the local ARES Net and we continued to operate continuously for about 330 hours." WA9AFM

In all nearly 335 hams provided some sort of communications assistance. Hams responded from Kansas and Texas. And there was plenty of need for what amateur radio could provide.

"We fanned out to various hospitals, this was in accordance with the catastrophic disaster plan that was already in place and which had been practiced frequently in the past. Hams were stationed in the emergency rooms, at the various regional hospitals around the city coordinating casualty evacuation, supply transfers and so on. After that phase was over we moved into our support phase where we were assigned to the various Salvation Army canteens, warehouses and state emergency command posts to coordinate moving of supplies, although our original function was to provide emergency communication it fell to us also to provide drivers because the limited access to the area, because in fact it was a crime scene. Hams who had such things as pickup trucks, suburbans, vans also were assigned to move a lot of supplies to the various areas." WA9AFM

Even in the heart of downtown, where cellular telephone service was available, there were communications problems only amateur radio could overcome. "In the downtown area, there are quite a few cellular nodes, public service and commercial radio transceivers. Those were knocked off the air and were therefore useless. And of course initially there was a tremendous load on the phone circuits, cellular circuits and also the public service radio. We provided underlying communications that allowed supplies to be ordered and transferred and their use coordinated. Our big contribution, I think was the fact we operating out of areas where there were no normal communications. Virtually everyone of the Salvation Armies six canteens were setup in the middle of the street. Obviously with no phone service in most of the buildings around the area were condemned and not inhabitable. We were the only none public service communications available." WA9AFM

There were technical challenges to overcome in providing communications. Webb says Oklahoma hams have a name for the vary area they had to setup stations in. "We were in what is referred to as Intermod Alley. And in the case of the canteens, being located on the street and in the first few days being moved quite frequently. In one place a handheld transceiver would work quite nicely and move a hundred feet in one direction and it wouldn't work at all. So we discovered that some sort of portable gain antenna is necessary in a situation like this. We also had problems the Sunday after the explosion when all of the pager, commercial and public service radios started coming back on the air down there and the intermod interference really stared to get bad for us. We had to fabricate some intermod fitting stubs and send them downtown so folks could use those to help with the intermod problem." WA9AFM

Disaster ready hams in Oklahoma know how important being ready for emergencies is. They keep emergency communications kits in their cars. The kits include materials like batteries, power adapters, and magnetic mount antennas. That kind of thinking ahead gave hams an advantage during the crisis. Webb says amateur radio operators put in a total of about 5500 man hours assisting in the explosions aftermath. Now they can look back at the nearly two weeks of communications services that they provided.

"I wouldn't want to do it again. But it certainly makes me feel good about the way we handled it. About the way all the agencies that were involved handled it. As one ham in the local area put it, I have never been prouder of my ham ticket than over the past two weeks." WA9AFM

April 19th brought the kind of communications emergency most hams have never even dreamed about. But Tom Webb says the Oklahoma hams handled it. And they did it with professionalism and pride.

One ham was inside the federal building when the explosion hit but escaped without injury. A second ham was inside a department store across the street from the Federal building the blast threw him across his desk. But he escaped serious injury by grabbing his chair as he was being blown across the room. That helped protect him from flying glass. Tom Webb sez that as far as he has been able to determine none of the people killed in the explosion were amateur radio operators....."

This insert was provided by the packet radio network and uploaded by ZR5DTS. Thank you to those operators for making it available for this program.

Contributors wanted

ANODE represents your views as members. It is often quite lonely to create a full magazine which will appeal to the full Branch membership. Consequently, often much of the material is sourced from outside; the usual place being the packet radio bulletin boards. For those of you with access to this network, applogies for presenting documents that you might already have read. (But then again what with the vast amount of information being delivered daily maybe my extractions are not viewed anyway!!)

I would dearly like some additional material for inclusion in the magazine. We are remarkably thin on DX and SWL news, contests and satellite technology. Insofar as satellite news is concerned, I can usually supply a paragraph or two but am having some difficulty in putting together a series of articles which will attract more to this exciting area of amateur radio. DX, SWL and contests needs some focus. What about it, surely someone in the Branch can put pen to paper once a month and generate say half a page of input. I would prefer not to receive the material handwritten or typed but on a 3.5" disk. (ASCII format) The reason for this is that I am not a typist and so retying documents is pretty time consuming and am usually under pressure to meet some deadline or other (UNISA assignments, branch bulletins, Council updates etc (No, the tear drops were removed in the copying process !!)

Notwithstanding the foregoing, there have been acusations levied in the past against ANODE compilers who have not included submissions or have "lost" them. I cannot comment about past practices but can assure you that all the input received to date has been kept and is usually consulted before making the final decision on content. One of the articles, for example, which is waiting in the wings is one prepared by Wally ZS6WAL about the life and conditions in Central Africa. Watch out next month for this which will probably be split into two so as to allow for other articles as well.

Home construction

This edition of ANODE carries a slight departure from the norm in the technical area. We are printing the correction to the 12v PSU as well as a price list of equipment available from Radio Services Electronic Kits. The reason for publishing this is simple; we would like to give members an opportunity to experiment with the "black art" of soldering and general construction techniques.

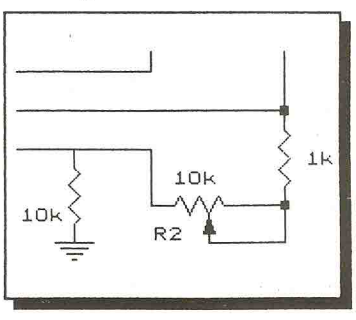
Annual General Meeting 8 July

Enclosed with this edition of ANODE is also a letter and proxy form in connection with the Branch Annual General meeting to be held on Saturday 8 July at 14:00. There has been fair exposure in the past to the requirements for the constructors awards so they won't be reproduced here (again) However, please read the letter carefully, make a prominent note in your diary for 8 July. In the event of you not being able to be present at the meeting, the proxy form can be used to nominate a fellow member to vote on your behalf. It is, however important that we get a good response to this meeting as it is here where the tone, direction and activities for the forthcoming year are set in the shape of the new committee.

Correction

Herewith the correction to the power supply published last month:

We are not going to blame anybody for the omissions or say at what stage in the production of this fabulous publication they occurred. Fact is, they were *deliberate* errors, inserted as a test of our readers' wits - and *you won!*



For your information, C1 should be anything from 40 000 to a maximum of 100 000 µF, C2 should be 100 pF, and R2 should be 10kΩ.

Finally **there should be a resistor of 1kΩ** between the end of the potentiometer R2 and the conductors that go to pin 3 of the IC and the fuse. The latter arrangement is clarified in the accompanying figure.

George, the author of the article, also recommends adding a ferrite bead to the + lead where it joins the terminal. This can help to prevent RF feedback via the power supply.

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Radio Services Electronic Kits

P O Box 44415, Linden,2195 ☎ (011) 782-3737

	CODE	PRICE	P/P
VHF RECEIVER: 144 -145Mhz high quality, nbfm. This receiver has many uses, Tunes 135-145Mhz.	1001	195.00	10.00
AM AIRBANDS RECEIVER: 1118-135Mhz dual if am. Highly sensitive and stable receiver with squelch.	1002	195.00	10.00
SHORT-WAVE DIRECT CONVERSION RECEIVER: An ideal receiver for the beginner. Receives ssb/cw/am, can be tuned from 6-10Mhz.	1003	85.00	8.00
WIDE BAND FM RECEIVER: For commercial data or bugging devices, can be set to any frequency.	1004	165.00	10.00
NARROW BAND FM RECEIVER: Crystal controlled for monitoring a single frequency.	1005	185.00	10.00
PA RECEIVER: For public address system, 10watts audio output used with remote fm microphone.	1006	180.00	10.00
FM RADIO RECEIVER: 88-108Mhz with audio amp. For the broadcast bands, small and not difficult to build.	1007	75.00	8.00
ACTIVE ANTENNA: Indoor antenna 3-30Mhz. Give your receiver a boost with this antenna.	1008	165.00	10.00
CORDLESS MICROPHONE/BUGGING DEVICE: 1 km range - use with kit 1004 or your own fm radio.	2001	95.00	8.00
CORDLESS MICROPHONE/BUGGING DEVICE: Extra long range - up to 5km's.	2002	165.00	8.00
REMOTE MICROPHONE: 36Mhz, crystal controlled. Long range. Must be used with kit 1001.	2003	165.00	8.00
7 WATT AUDIO AMPLIFIER: 7 watts power amplifier. From 12 volts. High gain.	3001	35.00	8.00
AUDIO AMPLIFIER 500MW: Used in many projects. Very simple to make, this an excellent beginners kit.	3002	35.00	8.00
LOW Z AMPLIFIER: Use a speaker as a microphone . Very sensitive.	3003	95.00	8.00

	CODE	PRICE	P/P
AUDIO OPERATED SWITCH: Can be used as vox.	3004	95.00	8.00
TONE ENCODER: Six way tone encoder.	3005	65.00	8.00
TONE DECODER: Single way decoder.	3006	65.00	8.00
TONE ENCODER/DECODER: Single chip tone encoder and decoder for single tones.	3007	45.00	8.00
MOSQUITO CHASER: Ultrasonic chaser.	3008	65.00	8.00
HI GAIN MICROPHONE AMPLIFIER: For 500 Ohm microphone to give your microphone a boost with this hi gain pre-amp.	3009	65.00	10.00
ULTRA SONIC RECEIVER: Detect ultra-sonic sound, gas leaks, car engines lectric motors etc.	3011	165.00	10.00
TIMER WITH RELAY OUTPUT: Many uses, built in relay. Can be used as a photographic timer.	4001	35.00	10.00
TOUCH SWITCH: Touch pad switch.	4002	35.00	8.00
ELECTRONIC IGNITION SWITCHING: Eliminate points ware and changing.	4003	65.00	8.00
BISTABLE SWITCH: Touch switch, one on, one off. Touch switch that turns on and when touched again off.	4004	30.00	8.00
BAYCOM FOR PACKET: For vhf amateur radio.	5001	130.00	8.00
WEATHER FAX SLOW TV INTERFACE: For amateur radio. Interface for slow scan TV.	5002	95.00	8.00
VFO - VXO: With broadband amplifier.	6001	65.00	8.00
VHF PA: 80 watt with 5 watts drive.	6002	400.00	25.00
VHF PA: 10 watts, 1 watt drive amplifier.	6003	160.00	15.00
RECEIVER PRE-AMP HF: Single fet pre-amp for any selected frequency on the hf band.	6004	35.00	8.00
VHF VFO - VXO: Multipurpose oscillator.	6005	95.00	8,00