



# Q S X P E



**THIS NEWSLETTER IS PUBLISHED BY THE  
PORT ELIZABETH AMATEUR RADIO SOCIETY**

**WEBSITE: [www.qs1.net/zs2pe](http://www.qs1.net/zs2pe)**

**PO BOX 10402  
LINTON GRANGE  
6015**

**JANUARY 2004**

## MONTHLY GENERAL MEETING

The monthly general meeting of the PORT ELIZABETH AMATEUR RADIO SOCIETY will be held on Thursday, 15 January 2004 at the St Hugh's Church Hall, Newton Park, starting at 20:00 (8 pm).

We have not engaged anyone to talk to us for the occasion, but some of us plan to bring a lot of stuff for the **bring** and **buy**. Maybe those who got Christmas presents that they don't want will also bring them along – provided the stuff is usable by radio hams.

Bill will provide the usual tea, coffee and numnums.

By the way, there was no actual monthly meeting at the November get-together at Ashley's place, so no minutes therefor, and of course there was no December meeting.

## Wrinkly Ravers

Barney's Steak Bar did us all proud again at our December rave and, presumably, also at the January one. Certainly the seventeen members at the December rave enjoyed themselves chatting before they tucked into their meals, and many are looking forward to the next. Since this newsletter is going to the printers before the January rave on the 8th we are unable to comment. We understand, however, that it will be a smaller group than in the past as a number of members have said they will be elsewhere.

Ken ZS2BWB expects to bring Bob K4CY and his XYL Lyn Furser along, who will be flying into PE for a while. We have met them before, especially at a Rave at Zwartkops.

Maybe Allan and Vicky Ansell will be there after their move. Joan and Bill Browne ZS2BY are probably not going to be with us just now since Bill is recovering from the heart attack that hit him early in December. We trust that we will soon have you back with us.

In the mean time, for our **second** get-together in the new year, it's Barney's Steak Bar, Circular Drive, Lorraine again. Let's see you on **Thursday, 5 February** at Barney's.

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## **TWO NEW PEARS AWARDS**

Elsewhere in this issue you will find the rules for two new PEARS awards that have been created, one for HF and the other for VHF. They rely on the Maidenhead locators of the stations worked.

It will take some time for the first

claimant to apply, but the sooner everyone knows about them the sooner they will be able to get down to working the relevant stations and recording their locators.

Good luck. 🍀



## from *The* *Chairman*

To those of you who have been away on vacation, welcome back. To those of you who stayed home, enjoy counting your savings. It's unbelievable just how much money can be wasted during the "silly season", but this is what constitutes economic activity – a necessary evil.

My "quiet time" gave me an opportunity to troll the internet in pursuit of news on my favourite hobby, and I stumbled upon a website that was in the process of archiving past issues of the now defunct 73 Magazine.

Reading through the 73 Editors Column, I was somewhat surprised to see that Wayne Green was complaining about the ARRL in much the same fashion as we hear South African hams complaining about our national organization.

In the August 2003 editorial, he makes mention that the ARRL is doing nothing to promote the hobby in the media, and that this isn't going to change – no matter how bad the situation becomes. He goes on further to say that the problem lies with the membership, not the office-bearers. If the members had any real concern about keeping the hobby going, they would not be so complacent!

He also states that around 95% of kids today are totally unaware of ham radio and that a booklet should be published, directed at kids, explaining what fun they could be having on our ham bands.

Strange, just when we thought that it was only in South Africa that we were faced with these challenges, we find the USA, with a ham population of around a half of

a million is grappling with the same issues.

The future of amateur radio lies in it's marketing, nothing more and nothing less.

Some of us will remember the CB radio explosion of the late 70's – this was marketing driven, and it collapsed when the hobby ceased to be marketed by the importers, retailers and clubs.

In much the same way the sales and usage of cell-phones have been driven by massive marketing efforts during the 90's.

Youngsters are not avoiding our hobby, they don't even know that it exists.

We should be targeting the publishers of cartoons, comic books, television shows, etc. to get our hobby "out of the closet" and into the public eye.

Let's apply our collective brain and manpower to the marketing and promotion of our fascinating hobby in 2004. We may have lost a few battles along the way, but the war can be won.

See you all at the next meeting.

73,

*Rory, ZS2BL*

**Here we are in 2004.** If I remember correctly, Shakespeare said, "Hope springs eternal in the human breast." So let us hope that things go well for us this year.

Certainly there is room for improvement in many ways, including the disaster management field.

While ECARES is only a voluntary organization and not normally involved in emergencies, we should just make sure that we are reasonably prepared

for any major disaster, or for that matter, any emergency that we may become involved in.

I hear that South Africa is facing the worst drought in 85 years. Will this affect us at all, and if so, how?


Well, that remains to be seen.

73

**Al ZS2U,  
Director, ECARES I**

## **ECARES MEMBERS with NEARNET INSTALLATION**

**Control centres are situated at Aliwal North, East London and Port Elizabeth**

<u>POINT</u>	<u>CITY OR TOWN</u>	<u>RADIO AMATEUR</u>	<u>CALLSIGN</u>	<u>NEARNET CALL</u>
3	Aliwal North	Nico Oelofse	ZS2N	47186
9	Graaff Reinet	Paul v.d.Merwe	ZS2PV	12382
11	Cradock	Donald Jacobs	ZS2BW	23404
20	East London	Matt Wallace	ZS2MW	34162
20	East London	Chris Barnes	ZS2S	34161
20	East London	Richard Seddon	ZS2CLI	34163
20	East London	Ralph Hall	ZS2IV	34164
27	Port Elizabeth	Al Akers	ZS2U	12308
27	Port Elizabeth	Ken Victor	ZS2OC	12300
27	Port Elizabeth	Des Pettit	ZS2ABU	60612
27	Port Elizabeth	Neil Thomas	ZR2NT	60613
27	Port Elizabeth	Ashley Goosen	ZR2AG	12366
30	Grahamstown	André Mulder	ZS2AJ	25525
31	Bathurst	John Hugo	ZS2J	25527
31	Port Alfred	Ginny Pullinger	ZS2GIN	25526
31	Port Alfred	Pat Pullinger	ZS2PJP	25526 

# SARLs LATEST LICENCE REQUIREMENTS

From an SARL Bulletin

Following the call for comments on the proposed changes to licence requirements and privileges, Council received a large number of emails, packet messages and letters expressing various opinions. We thank all who contributed their comments and suggestions. Having carefully considered the comments that were received, Council has made the following changes to the proposal:

1. Instead of introducing a new ZT licence class, the HF privileges that were to be given to the ZT licence will instead be given to the ZR licence class, including all existing ZR licensees.
2. These HF privileges will be extended to include both digital mode and phone allocations in the 20, 15 and 10-metre bands.
3. Alternatives to the Morse test will be offered for obtaining a ZS licence. This means that there will be several possible ways to fulfil the requirements of the ZS licence, one of which will be to pass the Morse test.
4. The practical operating test will be required for all licence classes, although each candidate will only have to pass it once, which will then suffice for all future licence upgrades.

With these changes the proposal is now as follows:

1. The ZR licence will obtain additional HF privileges with a maximum power of 100W in the following band segments:
  - 1.810-1.850 MHz
  - 3.500-3.800 MHz
  - 7.000-7.100 MHz
  - 14.070-14.099 and 14.225-14.350 MHz
  - 21.080-21.120 and 21.300-21.450 MHz
  - 28.050-28.150 and 28.300-28.500 MHz

To obtain a ZR licence candidates will have to pass the Class A RAE and the Practical Operating Test.

2. The ZU licence will have operating privileges in the same segments of the 160, 80, 40 and 10-metre bands as the ZR licence, but with a maximum power of 20W.

ZU licences will no longer have operating privileges in the 30 and 15-metre bands.


To obtain a ZU licence, candidates will have to pass the Class B RAE and the new Practical Operating Test.

The curriculum for the Class B RAE will be simplified to make it an entry-level licence along the lines of the British Foundation Licence.

3. The ZS licence will retain its current operating privileges. To obtain a ZS licence, candidates will have to pass the class A RAE, the Practical Operating Test and either:

- (a) The 5 w.p.m. Morse Test; or
- (b) An alternative assessment which has been accepted by Council for this purpose and which demonstrates advanced knowledge of, or achievement in, theoretical or practical aspects of amateur radio.

Council has embarked on a process to specify the alternative assessments to be accepted for the ZS licence and these will be announced in due course.

This proposal will now be submitted to ICASA who have indicated that they will call for public comment before enacting the necessary changes to regulations. Council believes that the proposal is well balanced and takes into account the aspirations and concerns of all different sectors of the amateur community, and calls on all amateurs to support it. 

# Weather Station Information on Packet

*Thought I would actually sit down and WRITE an article for a change, instead of promising to do so!! With the recent activation of the weather station transmissions from ZS2ABZ, this could prove interesting for locals.*

Packet users in the NMMM area will recently have noticed a new beacon every five minutes originating from the QTH of OM Bill, ZS2ABZ. It is a new PIC-based project initiated to disseminate the weather station information Bill gathers via his commercial weather station sensors fitted at his QTH. There are a number of local hams who own these weather stations, and it can easily be spread out to include these stations too.

The format used is APRS on packet. APRS is an automatic position reporting system designed by amateurs in the USA. It can be used to disseminate broadcast information from various sources via packet radio data messages.

Normally used for GPS-based tracking of mobile units, one of the sources can be fixed weather stations, like in the case of ZS2ABZ. The PIC project is based on the TAPR (a Tucson Amateur group) APRS encoder originally designed to take RS232 information from a GPS fitted in a vehicle and transmit APRS packet messages containing the position data from the GPS, so forming a tracking station, but without the need of an expensive TNC or laptop computer.

The weather station variant simply takes the RS232 information from the weather station display unit and formats the packet messages in the APRS weather station protocol and transmits them via a VHF radio. The software is engineered to understand the specific binary strings sent out by the WMR918 wireless weather

station that Bill has installed.

So all Bill had to do was to make space for an additional VHF packet rig with a prototype veroboard PIC interface with modem chip, to get up and running.

Of course he also had to put up with many visits from ZS2AAW while getting rid of the bugs and fine tuning the parameters. It is now up and running on 144.625MHz in the PE area, and beacons via Lady's Slipper so all users in the area that talk to the BBS will pick up the WX signal.

The easiest way to display the information is to load the shareware UI-View program, which will show all the readings in a pleasant graphical window. For those not running Windows, the data can be manually interpreted as follows:

A sample message appears below.

The first groups (on the lower line) contain Bill's GPS location 33deg 58.78 minutes South (note decimal minutes are used, NOT seconds) and 25deg 35.49 minutes East.

The underscore character tells us it is a weather station

Then the next 7 characters are wind bearing in degrees 0-359, a slash, then wind speed in mph.

All the following parameters are preceded by their descriptive letters:

g007 is the last minute's wind GUST speed in mph

t082 is the temperature in deg Fahrenheit

r000 is the last hour rainfall in hundredths of an inch, so 000 = 0.00in

## **Sample message:-**

```
12:50:19R ZS2ABZ-4>APEWX,WIDE,WIDE,WIDE Port=1 <UI Len=57>:  
!3358.78S/02535.49E_326/009g007t082r000b09940h24v-01Prev.Rain
```

b09940 is the barometric pressure in tenths of a hPa 09940 = 994.0 hPa  
 h24 is the relative humidity in percent 01-99, when 100% it displays 00  
 v-01 is the last variation of barometric pressure, and could be omitted if no change in the last hour

Then the interesting one: Prev. is a predicted weather forecast for the next 24hrs, it can be either Sunny, Rain, Cloudy or Partly Cloudy. This is a best guess based on the weather station's interpretation of rising or falling barometric

pressure, just like the old man used to do using the fixed needle on his barometer...!

The station will run on test for a few weeks while I am enjoying some time off at Bushmans. Next on the list is to get this beacons via Slipper onto HF and out via UHF to Governor'skop, EL and Cradock to generate some interest on their side. Maybe they will get something similar going from there, and then we can all sit back and look at the weather in PE and EL from our desktop!

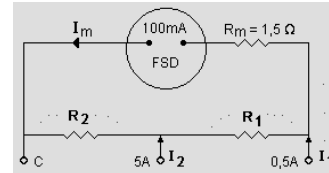
73 – Chris ZS2AAW

## AMMETER CIRCUITS

**Formulae for ammeter circuit in September issue:**

$$R2 = \frac{I1 I_m R_m}{I2 (I1 - I_m)}$$

$$R2 = \frac{R2 (I2 - I1)}{I1}$$

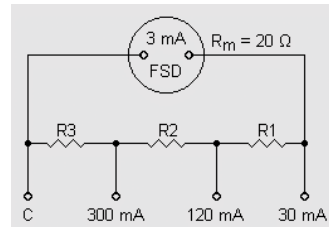


**Formulae for ammeter circuit in October issue:**

$$R1 = \frac{I_m R_m (I2 - I1)}{I2 (I1 - I_m)}$$

$$R2 = \frac{I1 I_m R_m (I3 - I2)}{I2 I3 (I1 - I_m)}$$

$$R3 = \frac{I1 I_m R_m}{I3 (I1 - I_m)}$$



Let  $x = \frac{I_m R_m}{I1 - I_m}$  **or** then

$$R1 = \frac{x (I2 - I1)}{I2}$$

$$R2 = \frac{x I1 (I3 - I2)}{I2 I3}$$

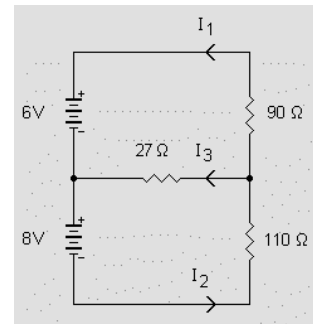
$$R3 = \frac{x I1}{I3}$$

**Formulae for ammeter circuit in November issue:**

$$I3 = \frac{V2 R1 - V1 R2}{R1 R2 + R1 R3 + R2 R3}$$

$$I1 = \frac{V1 + I3 R3}{R1}$$

$$I2 = \frac{V2 - I3 R3}{R2}$$



# VHF NEWS

from Barry Murrell ZR2DX

December proved to be a disappointing month for VHF operation, the only highlight being the Europa Island DXpedition run by a group of French operators. During early December they had worked several Division 4, 5 and 6 stations on 50Mhz FSK441, but nothing heard in Port Elizabeth. Finally Saturday 6 December saw the turn of Division 2, with an excellent tropo opening allowing both Ken ZS2BWB and Barry ZR2DX to make contacts on 50MHz via both SSB and FSK441.

This contact was over a distance of approximately 1900km, so may well be a new Tropo record. Signals were very strong initially, with Ken logging 59 both ways. The opening did however fade quite drastically, and had disappeared by the time Ken tried for a CW contact as well.

In the final week of their operation the expedition tried some 2m FSK441, but this proved unsuccessful. They did however manage to log ZS6WB in Pretoria.

In mid-December Derek ZS6DDG began operating on 2m from his holiday venue at Port Edward, KF58CX. Derek was easily worked in Port Elizabeth by ZR2DX using the new JT65 digital mode, despite there being poor conditions along the coast at the time. Derek will be at Port Edward until 10 January, and plans to operate from KF48 (a very rare grid) before his departure.

The PEARS VHF contest is upon us again, and in keeping with it's status as the PREMIER VHF event of the year several portable stations are currently being planned. These include some Cape stations who will be operating from mountaintops, as well as Rad ZS6RAD who is planning to operate from Swaziland. The new rules for the contest are on the PEARS website, so dust off your VHF equipment and give it a go!

2004 will see several VHF operations taking place within South Africa as well as from Namibia, Lesotho, Swaziland and Mozambique. Kosie V51E is now very active on 2m digital, Derek ZS6DDG will continue to travel the country as part of his saltmine activity, Pieter ZR1AEE anticipates a considerable amount of 6m activity from

Namibia during the year and Lee ZS5LEE is busy assembling a QRO VHF station in Durban.

Frosty K5LBU will be operating in March from Swaziland and again from Lesotho in July. He will have WSJT this time and will definitely be on AO-40. Rad ZS6RAD will be active from Swaziland, and a trip to Mozambique is being coordinated by Hal ZS6WB, operators unknown at this stage.

With the HF bands in such poor shape nowadays why not brush off the VHF allmode gear and join us on either 6m or 2m SSB, and if you have a computer why not give digital a try? You may find it far more exciting than you think!!


## SATELLITE NEWS

**AO-27 revived:** During the last week of 2003 the AO-27 satellite was revived, and several Stateside operators have reported making QSOs via the bird. AO-27 was launched in September 1993, and has been in a semi-operational state for some time.

Thanks to efforts by command operator Mike Wyrick N3UC the satellite is now fully operational once again. The operating frequencies for AO-27 are:  
Uplink : 145.850MHz FM Downlink:  
436.795 MHz FM.

**AO-40 latest:** The following was posted by Stacey Mills W4SM of the AO-40 Command team on 31 December 2003 :

"The lowering of ALAT is progressing well. We are currently holding ALON at 335-340 and lowering ALAT the last 10 degs toward 0. We will allow a few more (2-3) orbits for this to occur, to verify our position, and for the solar angle to decrease to below 40 degs for extra power. After that we will activate the passbands from MA 20 to 140. As we chase the sun back to 0/0 at about 1 deg/day, the passbands will be lengthened and moved more into the second half of the orbit."

By the date of publication of QSX AO-40 will be operational again. Anyone interested in setting up a station for AO-40 or any other satellite operation is welcome to contact Barry ZR2DX, who has a fully operational station and will be glad to assist with advice, suggestions and demonstrations. 





# The PEARS NATIONAL VHF / UHF CONTEST

23 – 25 January 2004

The PEARS National VHF/UHF Contest will take place on 23-25 January 2004. It is open to all amateurs in the RSA and the neighbouring countries. The rules for this contest have been updated to make it more interesting for participants.

**This 48-hour contest has been divided into two equal sessions of 24 hours each.** This means that the same station can be worked in **both sessions** and thus increase the activity. Furthermore, the field station category includes single or multi-operators or club stations.

Scores of each respective band will be multiplied by the number of grid squares worked on that band. Enjoy and good luck.

## Dates and Times

The first session of the VHF/UHF contest starts at 18:00 SAST on Friday 23 January and closes at 18:00 SAST on Saturday 24 January. The second session commences at 18:01 SAST on Saturday and ends at 18:00 SAST on Sunday 25 January 2004.

## Categories

1. Fixed Analogue Station
2. Field Analogue Station
3. Digital Station
4. QRP Analogue Station

## Analogue Station

Analogue stations compete in their respective categories and divisions only, but may score points from contacts with those in other categories and divisions. In the digital category, stations compete with other digital stations countrywide. All stations may challenge each other for the longest distance award on the bands authorized for their categories.

## Frequency Channels

50,200 - 50,240 MHz	SSB/CW
50,240 - 50,280 MHz	Digital
50,400 - 50,450 MHz	FM
144,200 - 144,240 MHz	SSB/CW
144,240 - 144,280 MHz	Digital
144,400 - 144,450 MHz	FM
145,475 - 145,575 MHz	FM
432,200 - 432,240 MHz	SSB/CW
432,240 - 432,280 MHz	Digital
433,450 - 433,500 MHz	FM
1296,200 - 1296,240 MHz	SSB/CW
1296,240 - 1296,280 MHz	Digital
1296,450 - 1296,500 MHz	FM

### HOW TO AVOID QRM!

Call CQ CONTEST on

**50,200 or 144,200 MHz,**

**BUT LISTEN FOR THE**

**STATION 10 TO 20 KHz**

**HIGHER and WORK IT**

**ON THAT  
FREQUENCY**

## Contestants

All South African amateurs as well as those in the six neighbouring countries, i.e. Namibia (V5), Botswana (A2), Zimbabwe (Z2), Mozambique (9), Lesotho (7P) and Swaziland (3DA), may participate and only contacts with these countries will count. A fixed station owner may allow other operators to use his/her station on condition that each operator uses his/her own call sign and participates as a separate entity.

## Reports and Scoring

A bona fide contact consists of an exchange of call signs, signal reports sent and received and location such as Maidenhead Locator or co-ordinates. (Note: Serial numbers are not required for this contest.)

Categories 1, 2 and 3 stations claim one point per kilometre per band, while those in category 4 (QRP) score ten points for each contact. Points may be claimed for only one contact with the same station on the same band during a session. The number of grid squares worked on each respective band will multiply scores for all the categories.

## Fixed Station

A fixed station with a single operator is the normal home or base station, using mains power and any man-made structure pre-existing on the site including antennas. Other operators may share a fixed station but only as single operators using their own call signs.

## Field Station

A field station is a temporary station set up in a tent, caravan or parked motor vehicle with suitable antenna systems, manned by a single or multi-operators using their own call signs or Club stations operating under their club call sign. Mains electric power may not be used, but portable power plants, batteries or solar panels are permitted.

## Digital Station

This category uses digital data modes such as JT44, FSK441 PSK31 etc. on 50, 144, 432 and 1296 MHz bands. Operators of the digital category may also participate in the analogue categories but as a separate entry. The highest combined score obtained countrywide on all four bands, multiplied by the number of grid squares worked on each respective band, determines the overall winner and runner-up. A Digital station may be operated as either a Fixed or Field station as desired.

## QRP Station

The QRP category is intended for those who are only equipped with FM transceivers and the operating power must not exceed 10 watts. This category is limited to 2 metre FM only, but a QRP station may work any other station in the designated channels in the 2 metre band. Any type of antenna may be used but all operating must be done from the same site. Even mobile operation is permissible as long as the vehicle is parked whenever a contest call is made and therefore could act as a rover.

## Log Sheets

Separate log sheets are required for each band worked. The top of each log sheet must indicate Band, Category, Name, Call Sign and Postal Address of contestant as well as location of the station. Log sheets must reflect Date, Time, Frequency, Call Sign of station worked, Signal Reports given and received as well as Location of the station contacted. All entries must be submitted to PEARS by the end of February 2004 and their decision will be final. The postal and e-mail addresses are printed below.

## Awards

PEARS will present certificates to the two stations that achieve the longest distance on each band, the divisional winners in each category and band as well as the overall digital winner and runner-up.

## Further Information

For further information please contact the Port Elizabeth Amateur Radio Society, P. O. Box 10402, Linton Grange 6015, RSA, or e-mail zs2pe@qsl.net or telephone ZS2FM at 041 581 2425 or Cell. 084 612 9600.

# SIMPLE “PATCHBOX” RELAY INTERFACE

by Johan Terblanche, ZS1I

I quote from a S.A.R.L bulletin dated 23 November 2003: “The linking between transceivers can be quite simple – a little experimentation with levels, and it can be done simply by holding the mike of one transceiver near the loudspeaker of the other\*. If you would like to try your hand at some electronic construction, a patch box is fairly simple and cheap to make.”

Although not quite the same as a patch box, the interface described can be put to good use.

This simple interface was designed to relay the following:

- 1 Musical transmissions from your computer to AM or 2-meter transmitters.
- 2 The Annual Remembrance Service (for amateurs who died while on duty for the RSA) from a commercial FM radio to 2-meter transmitter.
- 3 HF Bulletins to VHF and from VHF to HF.
- 4 Various other possibilities exist but its up to you to explore and add them to those already mentioned.

The design and outlay as per Figure 1, is very simple and need no further explanation.

Please note that the system described can be used with various types of “setup’s”. Again, experimentation is the name of the game.

## CONSTRUCTION:

A small piece of “Vero-board” was used to which were installed the 1: 1 audio transformer (a 600: 600 will also work), the 10 µf 25v Capacitor and the 500 ohm variable potentiometer.

The potentiometer is to set your input level to the transceiver. The necessary screened cable was added with microphone plug and 3.5 mm stereo jack-plug.

Don’t forget to install some sort of PTT switch. A normal on-off type switch will do the trick.

Finally, install the board and potentiometer in an aluminum or metal cabinet and off you go to do relays for your club or even the Presidents Net.

Please note that this is not a conventional “Patch Box”, therefore the name “Relay Interface”.

With a bit of altering and muddling you can alter the interface to a fully fledged Patch Box by simply adding a relay and a couple of in- and output sockets. However I

found that the interface described satisfied my relay needs in the shack. ☺

[\* I should like to take up arms against Headquarters for suggesting that a **regular** relay can be done by holding a speaker in front of a microphone!—Ed}

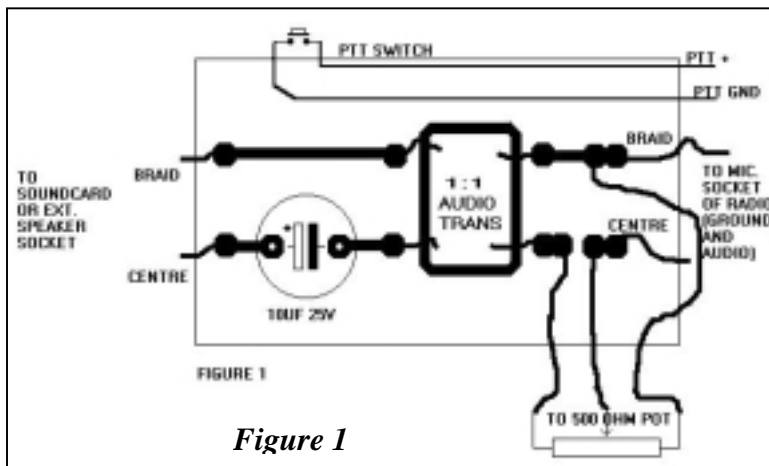


Figure 1

# HIGH POWER PSU

## with VARIABLE VOLTAGE & CURRENT LIMITING

by André Botes, ZS2ACP

The accompanying circuit by ZR6CPB appeared on Packet some time ago.

A PC board to accommodate six emitter resistors was prepared to handle 30 amps with ease.

Any number of pass transistors and corresponding emitter resistors may be used (up to six, as in the PC board shown below).

Reducing the transistors/resistors, as shown in the circuit diagram will, of course, reduce the maximum current available.

The PC board may be trimmed smaller if fewer transistors and corresponding resistors are used.

Three of these supplies have been built to date and all work perfectly from

2,8V to the maximum transformer voltage.

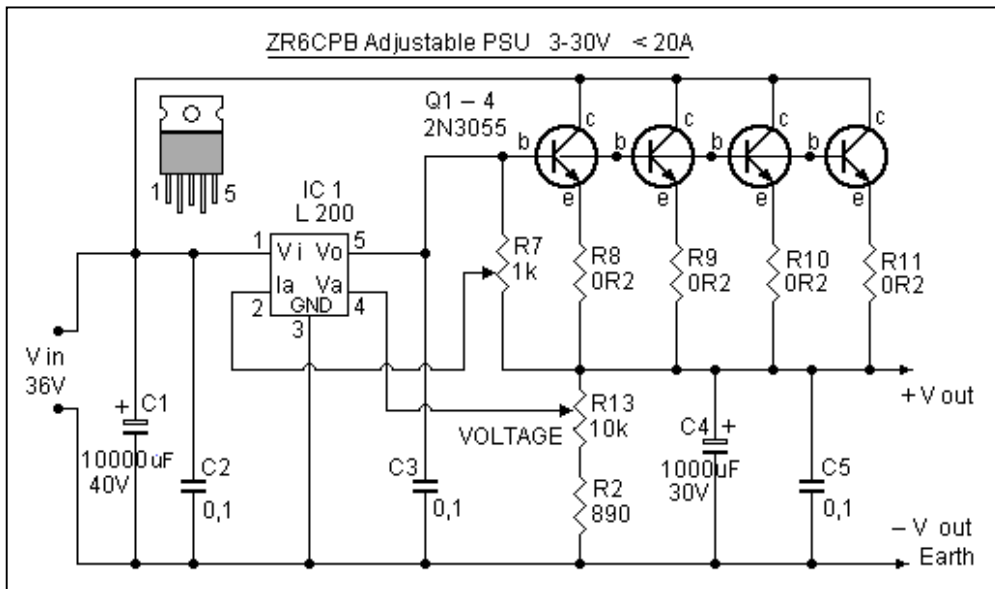
The pass transistors and regulator must be mounted on substantial heat sinks.

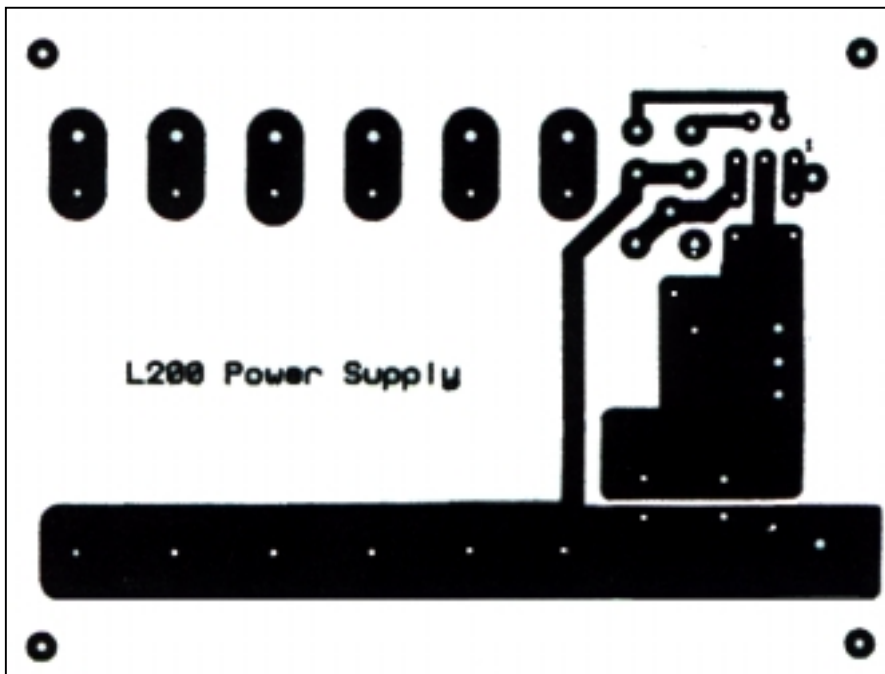
The transformer, bridge rectifier and smoothing capacitor may be chosen for the voltage/current required.

The circuit diagram appears below, while on the next page are drawings of the printed circuit board – to it's actual size – and an overlay showing the main components in their relative positions.

PC boards are available from Des Herselman, ZR2DH. He can be contacted on Cell 082 327 1062.

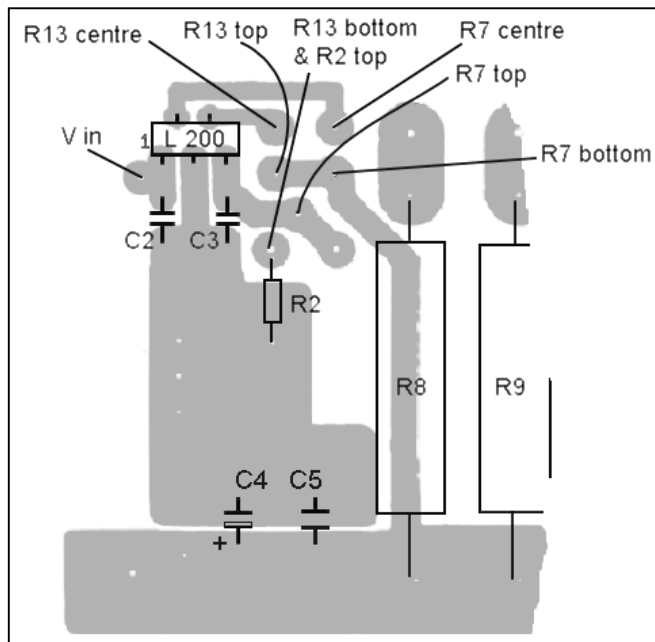
My thanks to Spencer at Universal Communications for doing the PC board overlay. ☺





**Above** – The printed circuit board designed for six transistors. The board is printed to correct size.

**Right** – The overlay of the PC board showing the layout of most components.



# Pearstalk



*(Some of these items are from SARL bulletins and ZS4BS Dennis Green's HF Newsletter)*

## **PEARS VHF/UHF CONTEST SOON**

The PEARS VHF/UHF Contest starts at 18h00 on Friday, 23 January and ends at 18h00 on the following Sunday, 25 January.

The set of rules appears at the centrefold in place of the usual nude photos. If there are any uncertainties, please contact Mike Bosch ZS2FM as indicated.

There are a number of changes to the rules, including authority to contact the same station twice, i.e. once on either side of the half-way mark. This means an increase in activity. Furthermore, the field station category includes single or multi-operators or club stations.

You ain't got much time left to check your equipment!

## **VHF & DIGITAL NEWS**

Last month we ran a few pages under this heading and suddenly realized that we had no credit line for it!

Barry Murrell ZR2DX, of course, provided the goodies, and we were happy to reprint it.

Sorry Barry!

## **TO4E WORKED BY LOCALS**

TO4E on Europa Island was worked by Ken Tremear ZS2BWB and Barry Murrell ZR2DX on 6 metres Digital and SSB recently. For Ken it was 1929 kilometres and for Barry, a little further south, 1943 kilometres.

Good going, guys.

## **QUESTIONS ON CONTESTING**

If you have any questions about contesting; Andrew ZS1AN has set-up a **FAQ on Contesting** web page. Visit the following web page and have your questions answered:

[www.qsl.net/zs1an/contesting\\_faq.html](http://www.qsl.net/zs1an/contesting_faq.html).

## **RADIO ZS**

Members can now download the most recent edition of Radio ZS from the SARL website. The file is 1,4 megs in size.

The Editor of Radio ZS has been busy preparing the last issue for 2003 and has been looking around for local articles. The issue will be available on the SARL website soon, if not now already.

Even if you have not been able to give him anything for the current issue, you can always do so in future. He can be e-mailed at [radiozs@sarl.org.za](mailto:radiozs@sarl.org.za).

## **SOMALIA AMATEUR RADIO**

We believe the following comes from an actual copy of a "Letter of Authority Regarding Amateur Radio in Somalia".

"The Ministry of Information, Telecommunication and Culture hereby gives Sam Voron authority to:

1. Conduct Somali Unrestricted Amateur Radio training, examinations and to issue amateur radio licences free of charge to successful students and
2. To issue Somalia Visitors Unrestricted Amateur Radio licences to visitors holding any

class of amateur radio licence.

3. Sam Voron may transfer all these powers to a National Somali Amateur Radio Society as soon as such is formed and ready to undertake these functions.

Such licences issued in the name of the Ministry of Information, Telecommunication and Culture is recognized as authorizing immediate amateur radio operation in Somalia.”

It was signed and stamped by Abdi Shakuur Mire Adan, acting Minister for the Ministry of Information, Telecommunication and Culture.

Well! Hopefully we won't see anything similar in South Africa.

### **MORSE GETS NEW CHARACTER**

The 2003 World Radiocommunication Conference (WRC-03) may have eliminated the treaty requirement for prospective amateurs to demonstrate Morse code proficiency to gain HF access, but the International Telecommunication Union (ITU) hasn't forgotten Morse code altogether.

The ITU Radiocommunication Sector agreed on the wording of a Draft New Recommendation ITU-R M.[MORSE] that specifies the international Morse code character set and transmission procedures. It includes a new Morse code character to cover the "@"; symbol used in e-mail addresses.

To keep up with the times, the IARU proposed adding a new character – the commercial "at" or @ symbol – to permit sending e-mail addresses in Morse code. The draft new recommendation proposes using the letters A and C run together (.--.-.).

### **NEW COUNCILLORS FOR SARL**

Well, did you chaps nominate anybody? You had up to 5 January to do

so.

The only nominee from ZS2 that I have heard of was Richard Seddon ZS2CLI of East London. Apart from that we shall have to listen and see just which others have been nominated, and how many of the old councillors will regain their seats.

The decision by Councillors to resign at the end of the forthcoming AGM was a democratic way to get Council filled with all those who members prefer and, at the same time, to shake off the hassles of the past. Nevertheless, whoever the Councillors are, it does not mean we will allow them to get back to spending money left, right and centre. Members will watch their performance and hopefully ask questions – like we in PE have always done, sometimes with no real answer.

In recent times we have had a good response from Council, who are apparently doing everything in their power to rectify things. We trust that it will continue so.

### **COCKSCOMB REPEATER**

Neil Thomas ZR2NT, Allan Whitehead ZS2R and some Black helpers recently went up the hill – not to fetch a pail of



water, but to have a look at the repeater up there, which had not been examined for quite a few years.

The photo shows the repeater and batteries, but there were other pictures showing a large break on the outside of the antenna coax as well as one of the group on top of the mountain, showing the precarious condition of the "stays"!

#### **INTECNET 2004**

The first INTECNET for 2004 will take place on Sunday, 18 January with Thomas Abbott as the guest speaker. The subject under discussion will be antennas.

#### **GET YOUR PHOTO IN SARL CALLBOOK**

The SARL call book allows you to add a photo to your call book entry so that people who you've chatted to can see who they've been talking to.

At present photos can only be posted by members, but members can post for anyone, so if you know a member, get him to post a photo for you. Or, even better, join the SARL and enjoy all the other online features that members have access to.

Photos must be in JPG format and be no bigger than 40 kb (Byte size). Photos display best if they are 400x300 pixels.

#### **LIGHTNING STRIKE**

Paul van der Merwe ZS2PV – who we introduced to you last month but without mentioning his callsign – had a spot of bother on 6 December due to lightning.

During a storm in Graaff Reinet, something nearby must have been struck. Although his antennas were disconnected, his equipment was still connected to the mains and earth, and he found some of it had been damaged.

We hope you have it all up and

running again, Paul.

To those reading this, let this be a lesson not only to disconnect antennas but also to remove the plug from the wall. I only do it when there is a pretty good storm around, but perhaps I need to rethink on it!

#### **WHAT'S A CROCODILE?**

*(Dave ZS5DRM and Highway Hotline)*

This is (supposedly! – Ed) a genuine reply to a grade 5 Primary school exam question – **Write an essay on the following question : "What is a crocodile ?"**

"The crocodile is a specially built so long because the flatter the better swimmer. At the front of the crocodile is the head . The head exists almost only of teeth . Behind the crocodile the tail grows. Between the head and the tail is the crocodile .

"A crocodile without a tail is called a rotwieler. A crocodile's body is covered with handbag material. He can throw his tail off if he gets a fright but it doesn't happen much because a crocodile is scared of nothing.

"A crocodile stays under water because if you were so ugly, you would also stay under the water, because a person gets such a big fright if a crocodile catches you that he first has to rinse you off before he can eat you.

"A crocodile isn't dangerous as people say he is, except if he catches you. The longer he bites you, the more it hurts. If you eat him, he is a crocosatie.

"A crocodile did not learn to swim with his arms so he uses his tail .

"The little brother of a crocodile is a lizard. The slow sister of a crocodile is a chameleon. The gay brother of a crocodile is a daffodil. And the crocodile also has a dead brother the frikkidell"

#### **THANKS**

*With our good wishes to all for 2004, I should also like to thank everyone who helped make QSO possible last year – the authors, the providers, Elize (checking, colouring in), Ashley (printing), Julie and Trevor (collation and posting) as well as many others. You are all tops! 📧*



**Condolences – We extend our condolences to Les Mandy ZS4WA, whose mother passed away early in December.**

*To those celebrating special days (18.1 to 21.2) we say*

**Have a Happy Day...** 

... on your birthdays

**January**

- 18 Dudley Forsyth ZS2AW
- 20 Barry Murrell ZR2DX
- 21 Margaret France ZS2HM
- 22 Judy Tremeer, XYL of Ken ZS2BWB
- 22 Bill Atteridge ZS2V
- 24 Anthony Bruyns ZR2APB
- 24 Michael Mkrakra ZR2MK

**February**

- 2 Shirley Winter, XYL of Gus ZS2MC
- 2 Ginny Pullinger ZS2GIN
- 2 Charlie Stevens ZS1AWG
- 3 Tom Davies ZSL037
- 4 Ivan Newman ZR2LN
- 7 Joan Bowles ZR2ABA
- 10 Wanda van Ree, XYL of Jan ZS2JW
- 10 Mark Hugo ZR2M
- 10 Lynne Crothall ZS2MM
- 11 Dirk Ligthelm ZS2D
- 12 Peter Lunow ZR2PEL
- 14 Del Bousfield, XYL of Neil ZR2DR
- 14 Arno du Preez ZS2ABT
- 16 Mike Hanslow ZS1RMS
- 18 Peter Flynn ZS2PF
- 19 Gary Laaks ZR2ABU
- 20 Vic Batt ZR2BBH

... on your anniversaries

**January**

- 20 Nita & Roger Davis ZS1J
- 22 Renette & André van Deventer ZS2BK
- 23 Natasha ZR2BCS & Anthony Bruyns ZR2APB
- 29 Margaret and Ken Victor ZS2OC



**February**

- 1 Lizette and Nicolas Oelofse ZS2N
- 5 Anita and Jacques Human ZR2XTC
- 15 Vanessa ZR2VM and Chris Scarr ZS2AAW



**Heart Attack:** Bill Browne, ZS2BY, had a serious heart attack on 7 December after playing in a bowls tournament. Seems like the reduction of food and water during the day brought it on. He was in ICU for some days then left for a general ward and, before you knew it, he's back home, answering the phone etc.

We wish you well, Bill. See you back at the Wrinkley Rave soon. 🗣️

## Your Society's Committee

Chairman, Awards.....	Rory Norton ZS2BL	585-9330	rory@commco.co.za
Vice Chair, .....	Chris Scarr ZS2AAW	368-1344	cvscarr@intekom.co.za
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## PEARS' VHF/UHF & Other Services

### REPEATERS

Town VHF .....	# 145,050/650	
Town UHF .....	# 431,050/438,650	Knysna .....
Cockscomb .....	145,000/600	Lady's Slipper.....
Colesberg .....	* 431,075/438,675	Noupoort.....
Cradock .....	* 145,050/650	Uitenhage.....
Grahamstown .....	* 145,150/750	

\* These form the PEARS long-range 2-metre repeater system, also linked to which are East London 145,775 MHz, George 145,700, Danabaai 145,600, Stilbaai 145,750, Butterworth 145,725, King Williams Town 145,625 and Umtata (438,725 duplex). It is further extendable to Cape Town via the WCRWG system. # These can also be linked as required.

### OTHER SERVICES

Packet Bulletin Board (ZSØNTP) .....	144,625
Packet Rose Switch ZSØGHT-3,046101 (144,675 in/out) or 046102 (UHF out to BBS).....	144,675
2m Beacon (ZS2VHF CW ID, FSK) (horizontally polarized, 160W ERP,) .....	144,415
6m Beacon (ZS2SIX CW ID) (horizontally polarized, 25W ERP) .....	50,005
6m Simplex Link with Lady's Slipper 2m Repeater (vertically polarized) .....	51,400

## Sunday Bulletins

PEARS bulletins are transmitted on Sundays immediately after the SARL English transmission, i.e. at about 08:45, on 7098 kHz as well as the 2 metre linked network that provides coverage from East London to George as well as Cradock and environs. PEARS' 7098 or 3640 kHz transceive facilities are also remotely linked as needed. In addition, the SARL's 40m operations on 7082 or 7066 kHz or Hamnet's 7070 kHz can be remotely patched to the 2m network, in receive-only mode or with full transceive capability for interactive events.

Date	Prepare and Read on 2m Repeater Link
11 Jan	ZS2RT
18	ZR2AG
25	ZS2ABZ
1 Feb	ZR2DX
8	ZS2BL
15	ZS2EHB

<u>DIARY DATES</u>
<u>JANUARY</u>
15 PEARS MONTHLY MEETING
18 INTECNET
23-25 PEARS VHF/UHF Contest
<u>FEBRUARY</u>
5 Wrinkly Rave
14 SARL Kids Day

\* We like being your Society \*