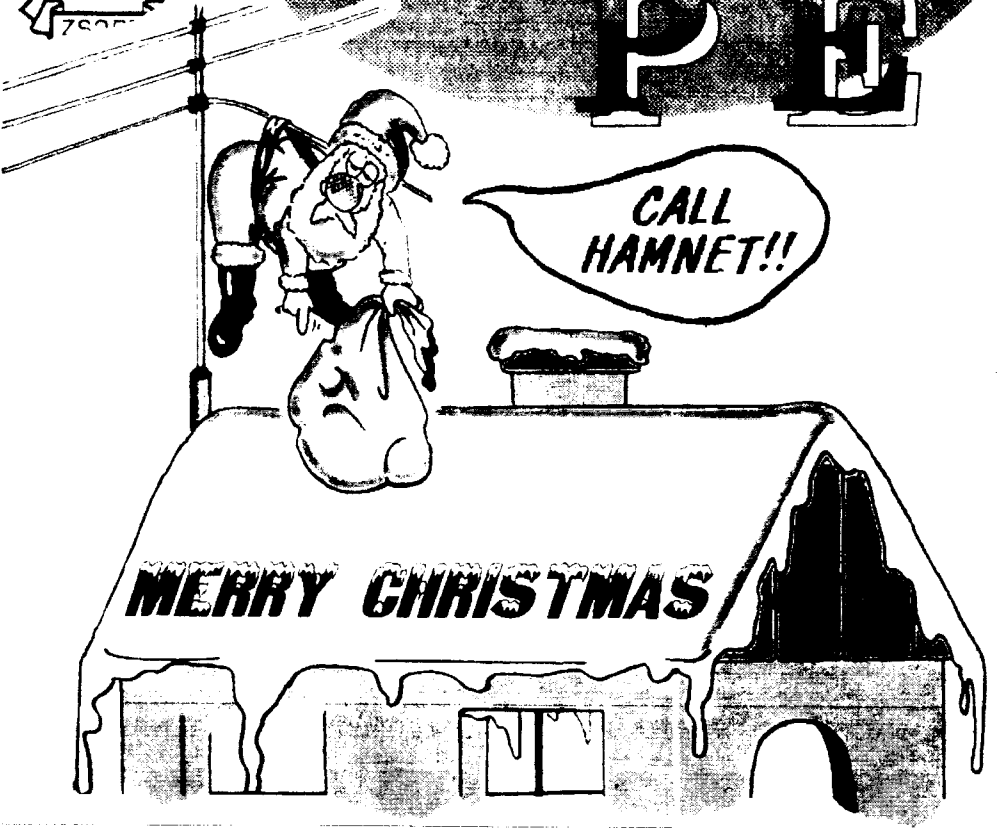


**Q S X  
P E**



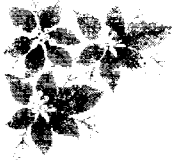
**THIS NEWSLETTER IS PUBLISHED BY THE  
PORT ELIZABETH AMATEUR RADIO SOCIETY**

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P.O. BOX 10402  
LINTON GRANGE  
6015

**DECEMBER 2000**



## PLEASE NOTE THAT THERE IS NO GENERAL MEETING THIS MONTH!

Remember that there will be *no ordinary general meeting* of the Society this month. This is traditional because of the numerous other get-togethers that make demands on members' time, and because many members are away on holiday on the usual meeting night.

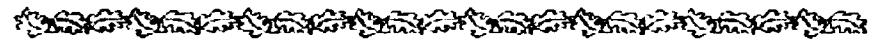
The next meeting, therefore, will be on 19 JANUARY 2001.

### IMPORTANT

Even though there will be no *club business* meeting during the festive period, the old fossils just can't be suppressed for long. They will 'do their thing' again in January, presumably on the usual first Thursday of the month, i.e. 4 January 2001.

The venue will be discussed at the December rave, which takes place as this issue is being printed, so we can't say what will be decided. Listen to bulletins and talk to your gabbas to get details, and

Come to the **WRINKLY Rave!!**



*COVER PICTURE* extracted and adapted with thanks from a humorous sketch by Alan Moore, son of ZS2VM several years ago.



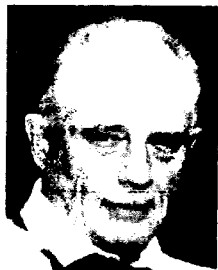
The Chairman and Committee of PEARS wish all members of PEARS and their families, the President, staff and members of the SA Radio League, and hams everywhere, not forgetting our friends at Instant Printing, a

*Merry Christmas*

*and a*

*Happy & Blessed 2001*





*The*   
*Chairman's Chat*

**R**AIN STOPPED PLAY insofar as our planned social at the QTH of Roger ZSIJ is concerned. But take heart – the event has not been abandoned but only postponed, probably to March 2001 or thereabouts. Keep reading your favourite ham-mag for updates about this important social happening.

Mel and I plus caravan headed for Nature's Valley in anticipation of the 'do' at Roger's, and in so doing we could not attend the final meeting of the year. By all accounts it was very pleasant, attended by some forty members and partners. Excellent attendance, considering the lousy weather. I bet the wives were somewhat surprised to see that a men-only team could produce such a well-presented table! Particular thanks to Bill ZS2ABZ, Greg ZS2RE and Ewalt ZS2EHB for seeing to the catering.

The RAE has come and gone, and thanks to organiser/lecturer Greg ZS2RE and lecturers Garth ZS2HB, Neil ZR2NT, Jim ZR2JRF [Wot about yourself?–Ed] for a job well done. Remember that there are a batch of newcomers to our hobby who cannot wait to get a mic into their sweaty palms, so please make them feel welcome when they do come on the air.

The good news is that the President of the SARL, Hans ZS6ALJ, will be paying PEARS a visit and will be attending our first meeting of the new year, to be held on 19 January 2001. He will be telling us about new developments, and will also answer questions etc. So, if something is bugging you, then bring it along to the meeting.

All that remains is for me, on behalf of myself and your Committee, to wish you all a blessed Christmas and everything of the best for 2001.

73,

*Beavan ZS2RL*

# HAMNET / ECARES NEWS

## FESTIVE SEASON

Yes, it is at our doorstep again. I wish to thank all the Hamnet/ECARES members for their support during the year and wish them all and their families a very merry Christmas and a happy and successful new year.

A special thanks goes to Ken ZS2OC who has been of so much help to me and also to Matt ZS2MW, who has looked after the East London area. Special thanks also to Garth ZS2HB for printing my contribution each month and for help in other ways, and to Des ZS2ABU for his regular reporting in on the six metre net, sometimes the only one.

ECARES has grown steadily through the year and membership currently stands at 53. Involvement with the SA Police Services and rural areas through NEARNET has given our communications capabilities a boost. So it has been quite a successful year for ECARES.

Bear in mind that the festive season means an increase in road traffic as people go away on holiday and with it unfortunately an increase in traffic accidents. So for this period particularly, monitor the emergency frequencies as much as possible. These are, of course, the two metre repeaters, particularly the linked system, six metres and HF. Daytime, monitor 7070 kHz and, at night, 3695 kHz.

## HAMNET

League Council has appointed a committee, chaired by Francois ZS6BUU, to investigate the functioning of Hamnet with a view to possibly restructuring it. Whether this will result in any worthwhile improvement or not

remains to be seen.

## SIX METRE MONITOR SYSTEM

At my smallholding I have a TR71 (A44) tuned to 50,450 MHz, the FM DX monitoring frequency, and the antenna connected to it is a ten wavelength vee beam pointing East-West (11 dB gain).

The receiver output is connected to a PRC77 which is tuned to 52,950 MHz, our emergency monitoring frequency. The transmitter output feeds to a two element beam pointing towards the city. This means that any FM signal coming through from, hopefully, far afield will be heard on our monitoring frequency, so alerting us to any opening.

Bear in mind that this is a one-way system. You will need to use your home station to communicate with any station on 50,450 MHz. This hopefully will increase our chances of hearing any openings.

## MEMBERS

We are very pleased to welcome Pat ZS2PJP and XYL Ginny ZS2GIN to ECARES. Thanks to Pat for a R50 donation to ECARES to help towards running costs. It is good to have ECARES members in Port Alfred and we now also have a connection to the Port Alfred National Sea Rescue Institute where Ginny is involved.

We are glad to hear that Jack ZS2KU is making good progress after his recent heart attack and hope he continues to do so.

73,

**Al Akers ZS2U**  
**Provincial Director,**  
**Hamnet East Cape/ECARES**

## BILL'S A YOUNG-LOOKING OCTOGENARIAN

HONORARY LIFE MEMBER BILL BROWNE ZS2BY, who spends half the year in Pretoria and the other half in PE, was at our November meeting and received an 'Ou Toppie' certificate recognizing his reaching of the grand old age of 80 earlier this year.

Looking a lot less than his biological age, Bill gave us a few pleasant moments reflecting on his amateur radio 'career', which dates back to the forties. He did not mention his saltmine career or the fact that, for a number of years, he was responsible in the Department of P&T's Head Office for the country's internal and international radiocommunication services.

Bill represented South Africa on numerous occasions at international radio conferences, including those of the ITU. The introduction of the first amateur radio technical examination also fell to Bill's lot. He retired from the service of the Department as Regional Director for Posts and Telecommunications in Natal.



## THINK THROUGH THESE THEORIES

A contest was held a while ago for people to submit their theories on *any* subject. Below are the winners:

**3rd RUNNER-UP** — (Subject: *Bio-Mechanics*) *Why Yawning Is Contagious:*

You yawn to equalize the pressure on your eardrums. This pressure change outside your eardrums unbalances other people's ear pressures, so they then yawn to even it out.

**2nd RUNNER-UP** — (Subject: *Symbolic Logic*)

Communist China is technologically underdeveloped because they have no alphabet and therefore cannot use acronyms to communicate technical ideas at a faster rate.


**1st RUNNER-UP** — (Subject: *Newtonian Mechanics*)

The earth may spin faster on its axis due to deforestation. Just as a figure skater's rate of spin increases when the arms are brought in close to the body, the cutting of tall trees may cause our planet to spin dangerously fast.

**HONORABLE MENTION** — (Subject: *Linguistics*)

The quantity of consonants in the English language is constant. If omitted in one place, they turn up in another. When a Bostonian "pahks his cah," the lost R's migrate southwest, causing a Texan to "warsh" his car and invest in "erl" wells.

**GRAND PRIZE WINNER** — (Subject: *Perpetual Motion*)

When a cat is dropped, it always lands on its feet, and when toast is dropped, it always lands buttered side down. It was proposed to strap giant slabs of hot buttered toast to the back of a hundred tethered cats; the two opposing forces will cause the cats to hover, spinning inches above the ground. Using the giant buttered toast/cat array, a high-speed monorail could easily link New York with Chicago. 

# Y2K Backup Comms Network Still Works!

CHRIS SCARR, ZS2AAW  
PEARS repeater working group



On Thursday, 16 November, the Y2K backup communications network was put into operation to provide relief comms for a group of Eskom Engineers and construction team in the Noupoort area. The run-up to this was as follows:

On Monday evening the 6th November, during a violent wind storm, a 400kV power pylon came crashing down on a remote farm near Noupoort. This caused one of the two main lines feeding the PE/EL area and most of the Eastern Cape to trip out.

Fortunately the load was low enough for the remaining 400kV line, which runs from De Aar to Bedford, to carry all the load, and no interruptions to supply were caused. However, the stability and robustness of the electrical supply to these important towns was no longer good. Should there be a fault of any sort on the remaining line, the whole of the area served would be plunged into darkness.

Eskom personnel immediately set about the task of re-constructing a temporary pylon, but this task was made exceedingly difficult because of the location of the problem - right at the foot of a mountain, with no Eskom radio or cellphone comms whatsoever.

By the middle of the following week, the staff were struggling so much that another plan had to be made. I was approached to try to assist them. Because our Y2K backup comms network which had been installed and tested almost a year ago had been left intact, I suggested a make-shift temporary VHF "repeater" be set up at the top of the ridge where the powerline servitude ran, and this unit

be linked back to De Aar via our Y2K links at Noupoort.

The equipment used was an Icom dualband mobile set, configured for automatic cross-band operation. The VHF side was set to an Eskom simplex operating channel, and the UHF side to tie into the Cradock UHF link from Noupoort. A suitable box and solar panel plus regulator was arranged for the equipment housing, and this was fitted by the De Aar technical staff the morning after the request.

The Ham system backbone was cut at Grahamstown towards Cradock, and also at Noupoort towards Colesberg, to isolate the section of the rest of the system. The Cradock repeater was also cut away from the backbone. Then the Y2K link at De Aar was connected, which couples the amateur backbone at Noupoort to the Eskom radio system at De Aar directly via a UHF link. This then brought comms from De Aar to Noupoort and out towards Cradock, where the temporary "repeater" Icom picked up the UHF signal and rebroadcast it on the simplex VHF channel and vice versa.

I use the term "repeater" with caution, as the Icom is not a duplex system at all, and only transmits OR receives at any time on VHF, so cannot act as a repeater as such.

The system was greatly appreciated by field staff, who could now talk back to their office counterparts using a

simple handheld radio "out in the sticks". Yet another wonder of the amateur radio service!

The system ran like this for four days, during which time the staff were able to erect a suitable replacement tower, and the line was successfully re-energised, some two weeks after the incident. This was a fair bit longer than the average 6 days, but understandable given the prevailing wet weather conditions at the time.

It is satisfying to know that, even a year after inception, the Y2K network was still available immediately for service, and I am sure we will endeavour to keep it that way. Incidentally, there are some 8 "hidden links" similar to the one that couples the Ham backbone to De Aar, which are available via DTMF to connect various other Eskom radio sites in a

similar fashion.

Finally, my thanks to the Cradock hams for their patience in being isolated for those few days. At one stage, ZS2BW re-connected the Cradock repeater, but before he could even get a word in, I hopped onto the system to inform him of the situation, whereafter he quickly disconnected the repeater again!

I also noted that there had been no traffic from Div 4, so there must be a problem at Springfontein still. I therefore reckon they would not even know the exercise occurred.

It is these small services that give the Hams a good name. It is good to be in a position to help, and not be the ones needing it!

73  
Chris

## FOR SALE ★ WANTED ★ SWOP

### WANTED

- \* **Scrap TH3 HF beam** for spares. Traps not required – Andrew Gray ZS2G, tel. (041) 585-0625 or 083 332 7765.
- \* **HF Antenna tuner**, Hercules Video Card for PC — Colin ZS2CR tel. 082 562 6663.

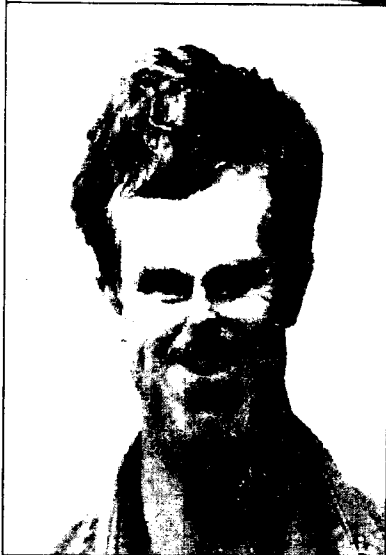
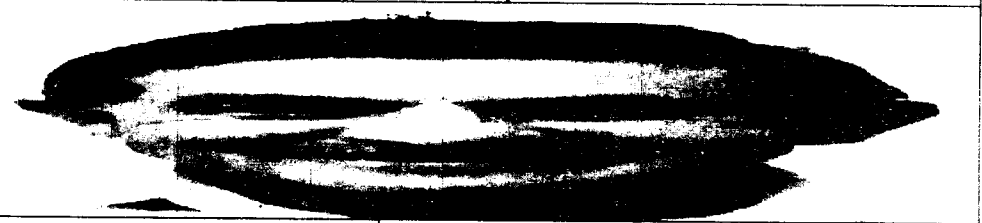
### FOR SALE OR SWOP

- \* Yaesu **FR100B HF RX and matching FL200B SSB HF TX** in good condition. What offers? Will consider a **swop for a 2 metre rig** – Cedric Bendeman ZS2TB, tel. (041) 373-1563.
- \* Motorola **MCX-100 40-watt** remote-mount ex-commercial **transceivers** programmed with all 2-metre repeaters plus popular simplex frequencies – R200; Uniden **VHF Marine transceiver** – R550; **29 MHz "boat" transceiver** – R200.— Colin ZS2CR tel. 082 562 6663.
- \* Kenwood **TS430S transceiver**; Kenwood **2m SSB transceiver**; **HF Linear amp**.— Sam Abrahams ZS2SI. Tel. (041) 583-3671.



**Laaks Luck** — Why is it that, when one hand is full of awkward parcels, no matter which way the bunch of keys comes out of my pocket, the one I need always has to be juggled to get it the right way round?





## WOTTA BUNCH!

THEY SAY a country gets the government it deserves, and by analogy a club gets the committee it deserves.

Well, I don't know what *PEARS* has done to deserve what *it* got on the committee, but just take a look at the crummy bunch of dummies in the adjacent pictures.

The Amateurs' Code states that hams are considerate and, being a true ham, I will spare the incumbents the embarrassment of identification. You can figure out for yourselves who they are.



# WHAT MAST HEIGHT FOR THAT INV VEE?

DENNIS GREEN ZS4BS  
Editor QUA

You decide that, instead of mowing the lawn or looking at the cricket this weekend, you are going to build that 40 or 80 metre (or any other band) inverted 'V' antenna you have been promising yourself. But how high must the mast be to be able to use the antenna effectively?

You must know, my knowledge of mathematics, Pythagoras and those other Greek guys is not up to standard. When I was at school mathematics had not been invented yet.

About two years ago I downloaded a series of articles about antennas

from the local PBBS, and forgot about them. While on course in Pretoria, I found them again on the PC and started reading. There I found a formula to determine the height of the mast.

$$a = \sqrt{0,5 C^2}$$

a = the height of the mast

c =  $\frac{1}{4}$  wavelength of the frequency of the antenna.

Example: 40 metre Inverted V

$$a = \sqrt{0,5 * 9,487^2}$$

a = 6.708 metre high.

**STOP!** Before you put up that mast, it is not ready yet. The ends of the antenna are not going to be anchored at ground level, rather at about 2 metres above ground level (kids, XYL and pets in the garden). So this distance must be added to the mast. In our example this would be  $6.708 + 2 = 8.708$  metres.

Now the antenna legs should hang at a 45-degree angle to the mast and be out of the way of the kids, lawn mower, braai area, etc.

*[Thanks, Dennis. I'll take your word for the accuracy of the calculations. When I went to school they had just invented the abacus—Ed.]* ☺

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## SOME AUTHENTIC NEWSPAPER HEADLINES

Police Begin Campaign to Run Down Jaywalkers  
Include Your Children when Baking Cookies  
Clinton Wins on Budget, But More Lies Ahead  
Juvenile Court to Try Shooting Defendant  
Stolen Painting Found by Tree  
War Dims Hope for Peace  
If Strike Isn't Settled Quickly, It May Last a While



# HEAVY DUTY POWER SUPPLY

An article by Al Akers describing a power supply appeared in the June 1993 issue of Radio ZS. The circuit, to which a fourth 2N3055 has been added to enhance the current handling capability, is shown in figure 1.

In addition to this, ZS2ACP has produced a circuit board which incorporates an over-voltage protection circuit adapted from an article by Bryan Haefele ZS2BH in QSX, April 2000.

The circuit diagram in Figure 1 is largely self-explanatory. The transformer secondary will need to supply the required current.

Diodes D1 to D4 should each be rated at 100 PIV. Each diode will carry half the load current but, as it should have a current rating of at least twice the value that it carries, its

actual rating should be at least equal the full load current value. Alternatively a bridge rectifier could be used instead of discrete diodes.

Use one 2N3055 for each five Amps. The accompanying circuit, therefore, is designed to deliver at least 20 Amps.


Mount the 2N3055s, TIP147 and LM317K on suitable sized heatsinks. The 0,2 ohm resistors in the 2N3055

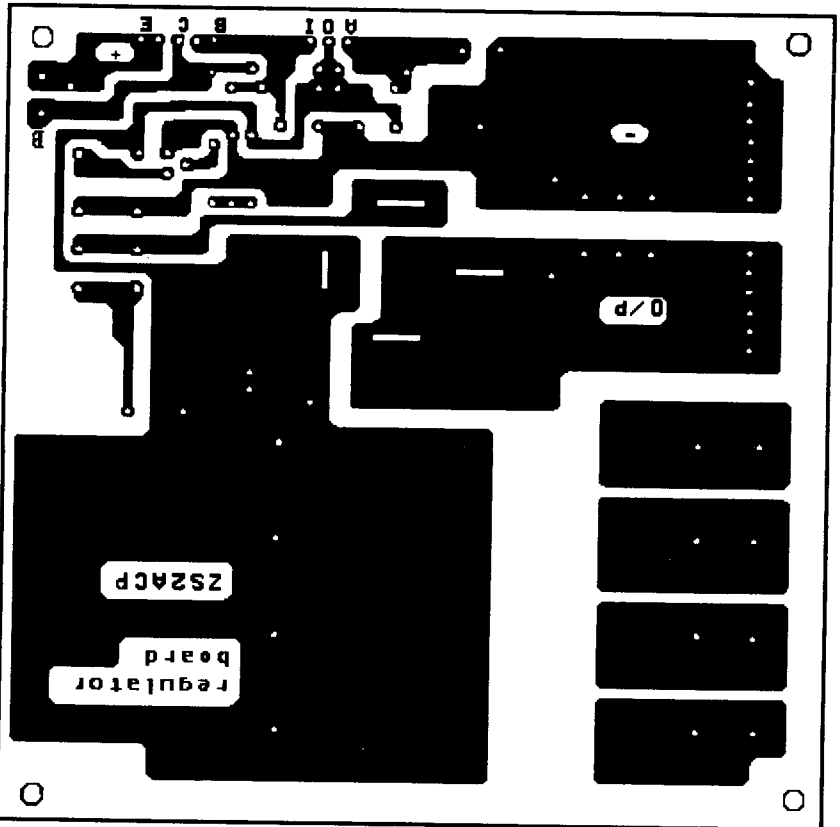
emitters should be wirewound and capable of carrying 5 Amps each.

The four capacitors across the output serve to bypass any stray oscillations to ground to prevent their feeding back into the supply. The 5 kilohm potentiometer is adjusted to give the required output voltage.

The PC board shown below is printed actual-size. A ready-made board is available from MTS Electronics. Figure 2 is the component overlay.

RLB is a 12V plug-in relay used in motor vehicles and can be obtained from most motor spare outlets. Its contacts must be capable of switching up to 30 Amperes.

Drill and file out the elongated holes on the PC board to exactly match your particular relay. 





## Letter to the Editor

# Something to Reflect On

Ken Tremeer <hamop@cybertrade.co.za>  
writes:

Dear Ed.,

I was delighted to read a recent Mike Bosch (ZS2FM) article in Radio ZS, that Nico (ZS4NS) of Welkom had worked Craig (ZS5AV) in Mid Illovo on 144 MHz over the Maluti and Drakensberg mountains. I know the topography of both their towns and, having lived at high altitude in the Maluti mountains at Mashai, I am intrigued by the radio conditions and/or other factors which must have existed to make their contact possible.

Coincidental to this, I had just finished reading an article entitled, Airplane Reflections at 10 GHz, in QST Magazine (December 2000) which I quote in brief, "that metal objects larger than several wavelengths in effective cross section make excellent radio reflectors, especially if the reflector is an airplane flying thousands of feet above sea level, it is possible to make interesting non-optical contacts over several hundred kilometers distance over high intrusive mountain ranges".

Phil W6HCC has been making 10 GHz aircraft- reflection contacts over the past several years based on careful planning, rather than the chance passage of an airplane at the correct altitude and location at the right time. (the article is far too long to be quoted in its entirety).

The intention of my note is to question the possibility that all the factors mentioned above, had perhaps come together, (if that is possible on a band other than 10 GHz), at the precise moment that ZS4NS and ZS5AV were calling each other? Bear in mind though, Mike's article draws attention to the fact that others have since achieved similar contacts. which maybe stretches the credibility of coincidence a little bit far?

During a recent visit to the Air Traffic Control at the airport, we saw that aircraft

en-route from, to, or through Port Elizabeth, travelled on assigned bearings and because of this, and assuming that the answer to the question I will be asking at the end of this note is positive, should we be devoting time and effort in trying to make long distance reflective contacts ?

As a final thought, Hams elsewhere in the world have for some time been bouncing signals successfully off the outer surface of the now "dead" Mir Spacecraft on 144 MHz. Therefore, the intention of my correspondence is to open debate on the subject by asking the question, "is this possible off aircraft using the 2m band?"


I invite your comments which will be appreciated and possibly delay the day when our worthy "Ed" becomes completely bald, by pulling his hair out trying to find articles for QSX.

Fraternally, Ken ZS2BWB

*Interesting thoughts, Ken! My son Keith ZS6TW has been trying to bounce signals off Mir for some while without success and would appreciate corresponding efforts from around the RSA. He can be contacted at 083 212 8413.*

*In Umtata, we had a low-power TV transposer situated on a hill 18 km to the North. Often the signals would flutter from reflections off airplanes - we knew it was aircraft because, if we tuned to the air band when this happened, we invariably soon heard them reporting after crossing the FIR boundary at Port St. Johns, and even further up the Natal coast, where we would hear them calling Durban Approach.*

*This would seem to suggest that reflective comms should well be possible on 2m, which is some 25 MHz higher than the air band.*

*Incidentally, the last hop of the microwave system from U/A to P/J uses a passive reflector on top of the North bank of the river to relay the signal down into the town. It still fills me with wonderment - it seems so unprofessional, so cheapskate - yet it works, and why should it not, since light is so easily reflected? - Ed. *

## PRESIDENT & VP TO VISIT US

SARL President Hans Potgieter ZS6ALJ and Vice President Sid Tyler ZS6AYC have been invited to address us at our monthly meeting on 19 January to explain the latest SARL developments. These include e.g. the proposed running of the RAE in toto and the issuing of amateur licences by the SARL.

Radio ZS will also change from its present format to that of a newsletter but it will continue to include advertisements and hamads.

We do not know at this stage whether the regular feature articles, such as those by our Mike Bosch, will be continued.

Because we expect a large turnout to hear all about it, and to put their questions and gripes about League affairs to the visiting Councillors, it is the intention to hold the meeting at a larger venue – possibly a Scout hall. The actual venue will be announced in bulletins and next month's QSX.

Please make a note of the date – 19 January – and be sure to attend.

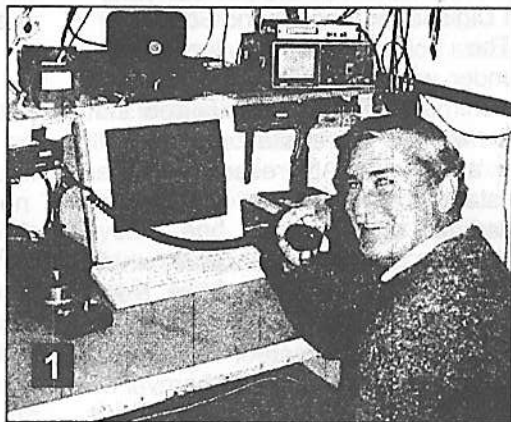
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## RAE CANDIDATES INITIATED

As reported last month, a braai was arranged at the QTH of Beavan ZS2RL on 13 November to let those who had written the RAE get the feel of a ham station in operation. There was an excellent turnout of candidates and lecturers and a pleasant time was had by all.

A bottle of good wine was presented to Greg by the students as a token of appreciation for the trouble to which he had gone to organize the classes and write a manual for use on the course.

Using two transceivers fitted with dummy loads, students took turns at communicating with one another between the shack and the braai area, with older hands keeping them on the straight and narrow.



In the photos are: (Photo 1) Martin Ras at the controls in Beavan's shack, and (Photo 2) lecturer Al Akers ZS2U with Dolphin Nel (middle) and Henry Danielson (right).

We hope to have a national hookup on HF for all SA candidates in future. ☐

# Was That the HOIA you Hoid?

ANDRÉ MULDER ZR2A

You have all heard this noise that sweeps across the bands. Well, never fear, here is the story about it.

The Hermann Ohthaver Institute for Aeronomy was established in 1983 under the directorship of a Prof J. A. Glenhill and is at present under the directorship of Dr Allan Poole of the Physics and Electronics Department at Rhodes University.

The aim of this research unit is to make ionospheric predictions using meteor trails to establish the dynamics of the lower ionosphere. To do this, two types of equipment are presently used.

- a Barry Research Chirpsounder,
- a Digisonder Ionospheric Sounder.

The Digisonder Ionospheric Sounder will eventually supersede the BR Chirpsounder. It is visualized that there will be three stations that will form a network. At present the other two stations are still under construction at Madimbu and Louisvale.

There is also a meteor radar, which operates at 27.99 MHZ. The Barry Research Chirpsounder is at present being used as the meteor radar. This unit detects the direction and arrival as well as doppler velocity associated with winds of the meteor region at

around 90 km up. Ten metre operators would have heard this one in the lower  $\pm 5$  kHz of the band.


The antenna system used comprises a dipole on the Barry Research Chirpsounder. power being used is at 10W continuous. The Digisonder antenna is basically two dipoles at 90 degrees fed by a single feeder with a balun at the antenna feed point, giving a vertically polarized signal. It radiates around 300W pep.

The receiving antennae are four directional units, north, south, east and west. Each unit consists of two loops at 90 degrees to each other.

All the results are contained in a data base that spans some 24 years.

Well, there you have it in a nutshell. Next time you pick up that sweeping noise across the bands you will know from where it comes.

You can see the Institute for Aeronomy research centre from the road between the turn-off to the industrial area and the Monument just outside Grahamstown..

Visit their web page at <http://phlinux.ru.ac.za/hoia/general.html> 



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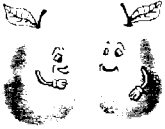
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# PEARS

## AANMOEDIGING

Ons het onlangs die volgende aanmoedigende kommentaar van George Honiball, een van die SARL se Hoofkantoorbulletinskrywers, ontvang:

"Baie dankie vir jou en Mike (Bosch ZS2FM) se items vir die bulletin. Marten en ek waardeer hierdie tipe van nuusitems vanaf die klubs; dit wys die klub doen iets positief omtrent amateurradio.

"Sterkte, en sukses met julle ondernemings en gaan voort om die toon aan te gee."

Baie dankie, George. Ons sal.

## SARL AGM TO TRAVEL?

A ballot is being held on the question of whether SARL AGMs should henceforth be held in different centres again, as was the vogue in the League's halcyon days.

A few years ago, linked to the erection of the League's own building outside Johannesburg, the decision was taken that all future AGMs should be held there. We never liked it because the high cost of travel and accommodation in Johannesburg removed, for many members throughout the country, the chance to see *their* League in operation, to meet the councillors who run it, or to renew old – and make new – acquaintances among the fellow attendees from around the country.

The camaraderie generated through this personal interaction contributed in no small measure to the happy state of ham radio and goodwill towards the League in days gone by.

Some of our members intended to

submit a motion for the SARL's next AGM to rescind the decision but the ballot now renders this unnecessary.

A reversion to the practice of moving the AGMs around the country will redound to everyone's benefit. Moreover, the club hosting an AGM can derive further benefit from the way that the team activity of organising a national AGM can draw its members closer together as well.

The cost of the course, including a PEARS manual, membership of PEARS up to *March 2002* and the entry fee for the RA examination, will be R200 for an adult, and R180 for a family member or a bona fide student.

## NEW MEMBERSHIP FEES

The Committee has suggested that members of *10 years' continuous standing with PEARS* and who are 70 years and older, should be granted free membership. If approved at the next AGM, the category will possibly be known as 'Ou Toppie' membership.

The member will receive one of our 'Ou Toppie' certificates, which heretofore have been presented to members when they turn 80 but without pecuniary benefit. (*Big word. Translation available on request.*)

Membership of the PE Branch immediately prior to the establishment of PEARS will count.

Another proposal is that, when a new member joins PEARS during the second half of our financial year, he or she should pay only a half of the full year's subscription for the remaining part of the year.

*This does not apply to late*

*renewals, so don't get any smart ideas, melads!*

Motions to approve these proposals and amend the Constitution will have to be submitted for consideration at the AGM next year.

### **OSCAR 40 (PHASE 3D) LAUNCHED**

Following a one-day postponement, Phase 3D was successfully launched at 0107 UTC on 16 November and placed into a geostationary transfer orbit, from which it had to be nudged into its final high elliptical orbit.

The satellite is not expected to be ready for general use for about nine months.

You can visit the AMSAT-NA website

<http://www.amsat.org>

for more information.

### **QRM TO SAPS FREQUENCIES**

The SA Police have been experiencing interference to their radio systems especially in Gauteng, and there is cause for concern that it could also occur in other areas.

The source has been traced to a particular make of a device known as a "remote blaster". The blaster converts infra red signals to radio frequencies and back again between remote control devices and their associated apparatus, enabling switching even when the two units are not in visual range of one another.

The illegal product was sold under the brand name "Magic Signal Sender". Other brands have been appropriately licensed by ICASA and do not cause problems.

Persons who hand in the illegal Magic Signal Sender before the end of February 2001, will not be prosecuted. If bought from Dion's, they will be

replaced with a legal brand. If not, Dion's are offering a cut price on a legal replacement brand.

### **RAE RESULTS KNOWN**

The November 2000 RAE results released in double-quick time recently showed that, out of the 144 candidates who wrote the examination, 127 passed. That represents a pass figure of 88%.

This time the ladies really out-performed the men. The candidate with the highest marks – *100% in both the regulations and technical!* – is Linda Myburgh from Pietermaritzburg. The youngest candidate to pass the exam is 12 year old Alletta Castelyn of Pietersburg, while the oldest is George King of Cape Town, aged 72.

Thanks must go to the SARL examiner, Rassic Erasmus, ZS1YT, for the smooth running of the examination administration and speed with which he announced the results. The invigilators must also be thanked for their part and their prompt rendition of the papers, and we must not forget to pat ICASA on the back for their speedy moderation of the papers.

See also the Chairman's comments on page 3.

### **RAE PAPER WAS 'OK'**

Seventeen candidates sat for the RAE examination in PE on 9 November and the general consensus was that the paper was 'not bad'. This is confirmed by the fact that fifteen passed – equalling the national 88% (see "Congratulations" at the end of the Newsletter).

A couple of questions bear reconsideration because of ambiguity or dubious necessity. For example, is it *really* essential to know *how much* the maximum permissible fine for a



transgression is, or is it sufficient to know that it *is illegal* and you could end up in court for it?

♦ Since we expect *one day* to have access to the whole 600 approved questions – we have been promised them for years – one wonders why clubs are not permitted to keep a copy of each exam paper for their guidance. That way we should eventually accumulate the 600 questions and they will obviously have been approved by all role players.

### **NEXT RAE COURSE IN JANUARY**

Greg ZS2RE has offered to run the next RAE course and already has a few budding candidates. He expects to make a start around mid-January. If you know of anyone who might be interested, please get him or her to contact Greg right away.

### **SARL TO ISSUE CALLSIGNS AND MODERATE THE RAE PAPERS**

SARL HQ reports that the Independent Communications Authority of South Africa (ICASA) has approved a proposal that call signs be issued by the South African Radio League to new applicants who pass the RAE. ICASA also said in their letter that, in addition, the SARL will be allowed to moderate the RAE on behalf of ICASA.

The SARL and ICASA will soon get together to agree on procedures to ensure that the process runs smoothly and is administered properly.

SARL President Hans Potgieter said that the new agreement will pave the way for more frequent radio amateur examinations, e.g. where clubs have a group of students ready

to write. Successful candidates will also receive their results faster and will be able to get their call signs in a shorter period of time.

It is expected that the new arrangements will come into force early in 2001.

This new agreement follows shortly on ICASA's approval of the new ZT 5 words per minute HF licence and the introduction of a learner's licence. In the case of the new licences, ICASA is waiting for the minister to sign before the revised regulations can be published in the government gazette and implemented.


### **NEW LOOK FOR RADIO ZS**

From January 2001 members of the SARL can expect to receive a new look Radio ZS. Council recently agreed to change Radio ZS to a newsletter format which would be mailed more frequently.

The decision was made to 'greatly step up the communication with members and to reduce the cost'. Part of the reduction in costs will be passed on to members. *No increase in membership fees is expected for the 2001/2002 membership period, and there could even be a marginal reduction!*

The cost of publishing Radio ZS in its current format has been escalating dramatically, making it an unattractive proposition for advertisers and the SARL.

SARL Council is convinced that, in its new newsletter format, Radio ZS will 'serve members better and bring amateur radio news and activities more frequently into their shacks'.

The new Radio ZS newsletter will still carry advertising and hamads and it will also be available on the members section of the web. 

# Congratulations...



## on your birthdays:

### **December**

- 18 Anne Olivier ZR2ABC
- 20 Marlene Ashwell ZR2ED
- 20 Marlene Gray XYL of ZS2G
- 20 Donald Jacobs ZS2BW
- 21 Paul de Vos ZS2ABY
- 21 Ron Clarke ZS2MF
- 23 Noel Hislop XYL of ZR2H
- 24 Bryan Marshall Snr ZS1NQ
- 25 Brian Weller ZS2AB
- 25 Mike Bosch ZS2FM
- 25 Betty Greeff XYL of ZS2ZG
- 30 Lida Ligthelm XYL of ZS2D

### **January**

- 9 André Greyling ZS2ACG
- 12 Bernice Marshall XYL of ZS1NQ
- 13 Blanka Batt XYL of ZR2BBH
- 14 Jacques Human
- 15 Neil Fulton ZS2MG
- 18 Dudley Forsyth ZS2AW

## on your anniversaries:

### **December**

- 19 Lida & Dirk Ligthelm ZS2D
- 23 Noel & Cyril Hislop ZR2H
- 24 Graze & Hermanus Nell

### **January**

- 1 Maureen & Neville Vroom ZS2NV
- 2 Julie ZR2EY & Trevor Scarr ZS2AE
- 3 Brenda & Allan Whitehead
- 9 Pam ZU1PAM & Phil Hopper ZS2PP
- 14 Vicky & Allan Ansell
- 20 Nita & Roger Davis ZS1J

## on passing the

**RAE** Glen Cummings, Henry Danielson, Mark Hugo, JP Human, Henning Kriel, Michael Mkrakra, Steven O'Reilly, Shaun Pohlmann, Martin Ras, Gareth Rathbone, Dean Russouw, Mentoor Steyn Syd Weatherall, Allan Whitehead and Colin Whitehead.

That's 15 out of 17 who wrote. Congrats also to Greg and the other lecturers on a job well done.

on your new status Bill Browne ZS2BY, who was awarded the PEARS Outoppie Certificate recognizing his ascension to the octogenarian ranks earlier this year.

on your 20 years of service to the likes of us, Sylvia, Robin and son Gavin of Instant Printing. Thanks for your unflinching efforts for a quick turnaround. We enjoy our monthly visits to the 'works'.



Welcome to New Member Dr. Bert van Rahden ZS6LP of Johannesburg. Hope your association with us will be pleasant, Bert.

New Call sign Nico Oelofse of Aliwal North, ex ZS4NIC is now ZS2N. The article in QSX recently enabled him to persuade ICASA that ALN is indeed in ZS2, and not ZS4.



## Your Society's Committee

Chairman, Awards.....	Beavan Gwilt ZS2RL	360-6968
Vice Chairman, QSX collation & mailing .....	Trevor Scarr ZS2AE	367-1746
Secretary, repeaters, packet.....	Chris Scarr ZS2AAW	368-1344
Treasurer: Assets Control.....	Clive Fife ZS2RT	367-3203
Social, Refreshments.....	Bill Hodges ZS2ABZ	581-2580
QSX Editor .....	Garth Laaks ZS2HB	368-1101
e-mail the Editor at.....	glaaks@iafrica.com	
Technical Classes, RAE.....	Greg Maynard ZS2RE	581-0991
Librarian .....	Neil Thomas ZR2NT	487-2403
Special Events.....	Ewalt Bouwer ZS2EHB	933-3482
Youth Affairs .....	Greg Maynard ZS2RE	581-0991

## PEARS' VHF/UHF & Other Services

### REPEATERS

Town VHF.....	# 145.050/650	
Town UHF.....	# 431.050/438,650	Knysna.....* 145.075/675
Cockscomb.....	145.000/600	Lady's Slipper.....* 145.100/700
Colesberg.....	* 431.075/438,675	Noupoort.....* 431.150/438,750
Cradock.....	* 145.050/650	Uitenhage.....# 145.075/675
Grahamstown.....	* 145.150/750	

\* These form PE's long-range 2-metre repeater system, also linked to which are East London 145.775 MHz repeater, 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 (ZSONTP) .....	144,625
Packet Rose Switch ZSOGHT-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
Wefax Relay (Meteosat).....	145,350

## Sunday Bulletins

PEARS bulletins are transmitted on Sundays immediately after the SARI, 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 SARI's 40m operations on 7082 or 7066 kHz or Hamnet's 7070 kHz can be remotely patched into the 2m network, in receive-only mode or with full transceive capability for interactive events.

Date	Prepare and Read on 2m Repeater link
10 Dec	ZS2RE
17	ZS2EHB
24	ZS2RL
31	ZS2AE
7 Jan	ZS2AAW
14	ZS2RT
21	ZS2ABZ

<u>DIARY DATES</u>
<u>DECEMBER</u>
9/10 ARRL 10m Contest
<b>NO meeting this month!</b>
25 Christmas. Net @ 0845?
<u>JANUARY</u>
1 New Millennium. Net 0845?
<b>4 Wrinkly Rave</b>
19 SARL Pres at PEARS meeting

**\* We Like Being Your Society! \***