

THIS NEWSLETTER IS PUBLISHED BY THE  
PORT ELIZABETH AMATEUR RADIO SOCIETY

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P.O. BOX 10402  
LINTON GRANGE  
6015

**July 1999**

# NOTICE OF MEETING

The monthly general meeting of the PORT ELIZABETH AMATEUR RADIO SOCIETY will be held on **Wednesday, 14 July 1999** commencing at 20:00 (8pm) in the Municipal Disaster Management Centre, Westview Drive, Mill Park, Port Elizabeth (Civil Defence Centre).

**The day and date has been changed from the usual third Friday** because the VW Rally will be in progress on our normal evening. The earlier meeting date will also enable the occasion to be

used for **final briefing** for those who are assisting with communications for the rally, who are urged to attend for the purpose.

Refreshments with munchies will be available during the interval.

**Please note  
change of  
meeting date!**

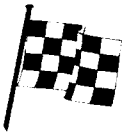
## *Wrinkly Ravers*

The **next rave** will be on **Thursday, 5 August 1999** at the Zwartkops Yacht Club Clubhouse. The kitchen has been delivering the goods promptly by 1 pm lately, so you need to get there in good time to place your order.

We look forward to seeing all you old fogeys at the next rave, so make a mark on your calendar or tie a ribbon around your kierie - *anything* to remind you. Peggy can even try tying a knot in Viv's hair - but be gentle, it's his last one!

We were happy to be graced at the July rave by the latest ascendants to the exalted WR ranks - Mel and Beavan Gwilt ZS2RL. 'Tis nice to have you two aboard, and we trust it will be a regular habit.

## **VW RALLY NEEDS YOU!**



Our organisers of the Rally communications network can do with more operators. If you can make yourself available on the Friday 16th, the Saturday 17th July or both days, please contact Al ZS2U without delay and offer your services.

Last-minute snags are often encountered which require re-allocation of the available manpower/womanpower. And you'll enjoy the action.

## **IMPORTANT - RAE CLASSES!**

If you know of anyone who might be interested in joining our current series of **RAE (Radio Amateur Examination) classes**, please ask him/her to contact **Cyril Hislop** without delay. Classes have already started. **Cyril's phone number is on page 15.**



## *A Word*

### *From the Chair*



**I** still marvel at the great social atmosphere that prevailed at the Bathurst bash. What a pleasure it was to be part of a group of people with such good spirit! And it was great that so many folk were prepared to travel a fair distance to the gathering – I am sure all were well pleased that they did.

Our thanks once again to Neville and Maureen for their hospitality, and those ladies that assisted them in the preparations for the day – your efforts made it a success. The braai was a real success – I am looking forward to a similar event within the next six months.

It was great to meet the new President of the Radio League – he seems to be on the right track, and we wish him well in the directorship of our national body. Let's put our support behind them.

**T**hanks to Cyril and Viv for getting another RAE class off the ground. Also to Neil for the efforts on the constructors/technical side of the hobby. I am looking forward to learning more about the PIC chips myself. The mind boggles at what our next generation of repeater control card could be capable of!

**R**ally fever has taken its hold on some of us involved in the organisation thereof. I can only thank those chaps on the rally organising committee for a fine job done so far – I am sure it will be another smoothly run event. But not without its problems, what with fire hazards causing the forest to be closed unless rains fall – I never thought I would wish rain on us around an event like this – the less slippery the roads, the better for our radio marshals...!!

I wish all those that have volunteered for this event much fun and excitement. Thanks for your time and effort.

73,

*Chris* ZS2AAW

# HAMNET / ECARES NEWS

**I**t is rally time once again and, as I have stated before, this is an excellent emergency exercise for our members, and at times it is the real thing when the rally participants land up in trouble. It is also good fun. Hopefully as many of our members as possible will be assisting with communications.

Use a suitable microphone. Many handi-talkies use electrostatic microphones, no doubt because of their small size and simplicity. These microphones have good bass response and pick up distant sounds well and thus are most *unsuitable* for this type of operation.

It is better to use a dynamic microphone, but even here it is advisable to try several to get the best results. It is very difficult to beat the army type microphone. They are designed for

close talking and have a narrower frequency response to discriminate against low frequency sounds, and thus provide more effective communications. The army earphone works just as well as a microphone.

For the benefit of newcomers, take with you pens, writing paper, clipboard, watch and glasses if you wear them. Also liquid refreshments and food. If you will be operating when it is dark, take a torch and have a light in your vehicle suitable for your operating.

73,

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

## FOR SALE ★ WANTED ★ SWOP

### WANTED

- \* **HF Transceiver**, preferably older (valve) type e.g. FT101, TS520 etc.—**Paul Smith ZS2OE**, tel. 586-2222(W), 364-0133(H).
- \* **Mobile bracket** for (or adaptable for) IC290D transceiver—**Garth Laaks ZS2HB**, tel. 38-1101.
- \* **Yaesu YC-601 Digital display** unit and **YP-150 Dummy load/wattmeter**—**André Botes ZS2ACP**, tel. 73-2058.

### FOR SALE

- \* **Computer**, 286 Acer, mono VDU, **Star dot matrix printer**, all excellent condition; **Hy-gain 12V motorised, extendable 2m antenna**,—**Vic Plumridge ZS2VP**, tel. [046] 648-1928.
- \* **FT480R 2m all-mode 10W**; **FT680R 6m all-mode 10W**; **FRG8800 comms receiver**; **FT107M HF all-mode transceiver**; **FP107E psu** for above; **FC107 atu** for above; **YVM-1 Monitor**; **Tono 9000E comms terminal**; **TS130S HF ssb transceiver**, 100W; **AT230 atu**; **MA5 mobile HF antenna**; Three lengths (22,5m, 24m and 8m) **Coax RG213 or RG8U**. From estate late Jack Smailes ZS2SM. **Offers in sealed envelopes to reach Beavan Gwilt ZS2RL**, PO Box 10402 Linton Grange 6015 by 31 July 1999. Phone 360-6968 to view.

# THE NEW LICENCE PROPOSALS

Introducing the Indaba on the Air on 27 June, President Hans Potgieter explained that four classes of licence were envisaged, namely the present Class A (full ZS, to be known as Class A1), the Class A (Restricted) (ZR, to be restyled Class A2), the Class B (our Novice or ZU – to remain Class B), and a new class, A3, which will carry a ZT prefix.

The existing ZS and ZR licence requirements will remain unchanged. A candidate who passes the Class A examination will naturally qualify immediately for a ZR (Class A2, or "restricted") licence. However, upon also passing a 5 wpm morse test, he will be able to obtain a ZT (Class A3) licence.

This will give him all the privileges *in South Africa* of a full ZS licence except the output power, which will be restricted to 100W (ZS and ZR stations will be authorized to run a kilowatt if the proposals are accepted!).

An already-licensed ZR operator could obtain a ZT licence by simply passing a 5 wpm morse test. However, like our Novice class, but *unlike* the A1 (ZS) level, a ZT licensee will not be permitted by foreign Administrations to operate in their countries under reciprocal (e.g. CEPT) agreements.

A ZT licensee wanting to operate abroad will have to pass a 12 wpm morse test which, of course, then entitles him to a ZS call sign.

The ZU (Novice) licence requirements are to shift towards the schools' Curriculum 2000 concept, with a hands-on approach in which the candidate needs to construct a prescribed number of modules of the out-come based education scheme. This will probably be done using kits which the SARL is trying to source and will hopefully be able to supply. The candidate could in fact construct a receiver and transmitter suitable for the power restriction of 20W that will continue to apply.

The shift at last to technical involvement is a move in the right direction! Of course, we

have been urging the proper recognition of the technical nature of Ham Radio for years. It remains now to introduce *negative marking* in the RAE and we will be well on track.

Incidentally, the intention is to use the prefix ZT1 for the Class A3 licence throughout the country, irrespective of the licensee's location. This is said to be to avoid expected hassles related to the number of provinces in the new South Africa.

One finds this puzzling because the ZS zones already ignore provincial borders and have done so for many years – ZS1 and ZS2 share the Cape Province, and the Northern Cape fell under ZS4 together with the Free State until South West Africa became Namibia. Since then, the northern area of the Cape Province has used the prefix ZS3.

There should really be no reason to confuse the Rainbow provinces with amateur radio prefixing anyway. The USA accommodates over 50 States with only 10 numerical divisions. Moreover, at the SARL AGM in PE earlier this decade, a motion was adopted urging that the ZUØ prefix be modified to include the call areas. It will be even more important to ZT licensees and an early motion for an amendment can be expected.

- Remember – these are only proposals at present. Although SATRA may have agreed *in principle* to the SARL's submission, the Radio Regulations have yet to be amended. This is likely to take some time. ■



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**MINUTES OF THE MONTHLY GENERAL MEETING OF THE PORT ELIZABETH AMATEUR RADIO SOCIETY, HELD AT THE MUNICIPAL DISASTER MANAGEMENT CENTRE, MILL PARK, PORT ELIZABETH ON FRIDAY, 18 JUNE 1999**

**Present & Apologies:** Fifteen members attended. Apologies were received from ZS2AAW, ZS2DD, ZS2RT, ZS2FM and ZS2AE.

**Welcome:** In the absence of the Chairman, Beavan ZS2RL opened the meeting at 20:04 with a welcome to all.

**Minutes of the Previous Meeting:** Accepted – proposed Neil ZS2NT, seconded Gus ZS2MC.

**Matters Arising: Bathurst Bash:** Beavan reported on this most successful outing on 16 June, which was also attended by SARL President Hans Potgieter ZS6ALJ, who addressed the 80+ participants. A vote of thanks was passed to Neville Vroom ZS2NV for the use of his facilities and to his XYL Maureen, Pam ZU1PAM and their helpers for thoughtfully providing refreshments to welcome attendees on their arrival.

**SARL Field Day:** Agreed to go ahead. Cyril ZR2H will initiate and co-ordinate plans.

**Finance:** On behalf of the Treasurer, Garth gave details of the financial situation, which is very satisfactory.

**Correspondence:** Newsletters from other clubs and some rally questionnaires.


**General: VW Rally:** The Chairman invited those wishing to help with the *organization* of rally communications to meet at his QTH the following week. He appealed to all who would be able to assist with the actual comms to send in their questionnaires or telephone him or Al as soon as possible.

**July Meeting:** Because of a clash with the rally date, it was decided to bring forward the July PEARS meeting to the preceding Wednesday, 14 July. This would also serve as an opportunity for final briefing for rally communications operators.

**PEARS VHF/UHF Contest:** Certificates were handed to Al ZS2U, who won the Division 2 Field Station category on 50 and 144 MHz. Garth accepted the certificates for the other members, Mike ZS2FM (Div. 2 Fixed, 50 MHz), Ken ZS2BWB (Div 2 Fixed, 432 MHz) and Johannes ZR2JLP (Div. 2 QRP, 144 MHz)), who were not present.

**Outstanding licences:** Beavan informed members that, if they have not yet received their 1999 licences in spite of having paid for them, they could visit SATRA's PE office in Norwich Union Building on Market Square and be helped immediately.

**Technical talks:** Neil ZR2NT suggested, and it was agreed, that we should have technical talks at every alternate monthly meeting. Also, several members were interested in reviving additional technical get-togethers and Neil would start the ball rolling by arranging a course on PIC programming and also a discussion on the usefulness of the device at a forthcoming general meeting.

The meeting closed at 20:40 and members chatted over refreshments organised by Bill ZS2ABZ. 

# CB PLL CONVERSIONS

VIV MOORE, ZS2VM

Of late there has been a fair amount of interest shown in transverters using CB sets as the IF. This has meant that more channels than the legal nine are required and/or that the operating frequency has to be changed.

In most instances the local oscillator has to be altered and, in the case of a CB set, this is the phase locked loop oscillator or PLL. To understand how these oscillators operate will make the adjustments a lot easier.

The basic PLL shown in Fig. 1 has four sections—

1. The *Reference Frequency* and, in the case of a CB set, this is 10 kHz, which is the channel spacing;
2. The *Voltage Controlled Oscillator*, VCO, which is the CB set's local oscillator;
3. The *Phase Detector*, PD, an internal part of the PLL integrated circuit, IC;
4. The *Programmable Divider*. The channel selector switch determines the number we are going to divide by.

Follow the arrows in Figure 1 below. The reference frequency is fed into the phase detector, which puts out a voltage. This voltage determines the

voltage that it feeds to the VCO. This, in turn, alters the frequency of the VCO and the loop goes around again until we reach equilibrium.

Don't worry about where it starts or you will end up in the loop!

Let us change the divide ratio, say, from 20 to 21. It is obvious that the two frequencies entering the PD will not be the same, so we are back in the loop again.

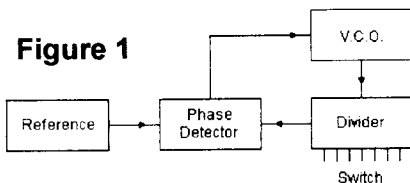
The way this is done is by connecting certain pins on the PLL IC either to the positive supply or to ground.

This brings us to the next stage and it may best if we look at an actual PLL in use.

The PT8MO48AOX board is used in a number of popular sets such as Major MSB 6205, Tedalex TE 6000 and GE3-5825A, all of which use the PLL02A integrated circuit to generate a frequency as part of the local oscillator.

The IC is a 16 pin dual in line device and listed below are the pin allocations. The unit is marked in some way and, with this mark held furthest from you and the pins facing downwards, the far left hand pin is pin 1. The far right hand one is pin 16.

All measurements made are between ground and the measurement



frequency of the VCO.

The oscillations are fed into the divider that brings this frequency down as close as possible to the reference frequency. The PD takes the two signals, compares them and, if they are not exactly the same, it changes the

point.

**Pin 1** is the positive supply and must not exceed 6v, usually 5v.

**Pin 2** is the input for the frequency that gets divided and determines the output frequency of the PLL.

**Pin 3** is the input for the reference frequency, which is 10.240 MHz. There is an internal divider, 1024, that reduces this frequency to 10 kHz, the normal CB channel spacing, which is fed to the Phase Detector.

**Pin 4** – If a positive supply is applied here the channel spacing is 10 kHz but, if grounded, it changes to 5 kHz.

**Pin 5** is the output for the voltage generated by the PD and fed to the VCO.

**Pin 6** – If for any reason the PLL becomes defective the voltage at this pin goes positive and activates a switch that disconnects the transmit circuit.

**Pins 7–15** are the pins used for programming the channel requirements.

**Pin 16** is the grounded pin.

mixing a crystal oscillator frequency with that of the VFO and the difference is fed to pin 2.

The crystal frequency is 10.0525 MHz, which is doubled to 20.1050 MHz and then fed to the mixer.

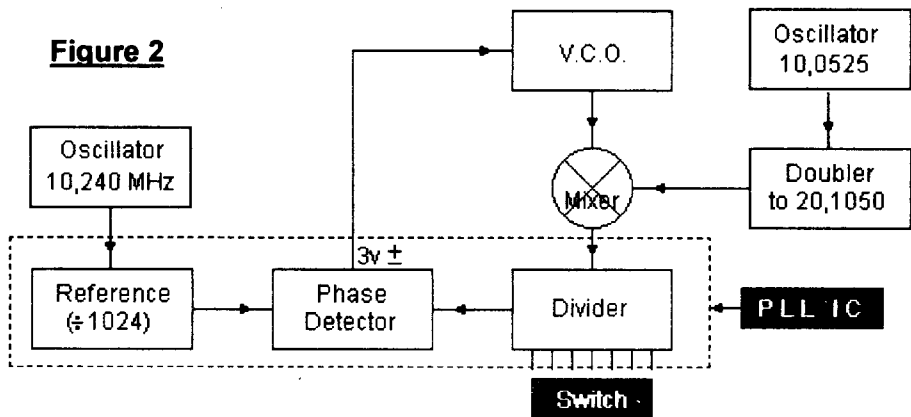
On channel 19 the VFO runs at 17.775 MHz, so the difference between this and the 20.1050 is 2.33, which is divided by 233 to get the 10 kHz that is compared with the standard at the PD.

A popular modification for shifting the frequency is to exchange the crystal for one of a slightly higher frequency, say 10.55 MHz, which will raise the operating frequency to 28.075 MHz with channel 19 selected.

Another method is to change the programming at pins 7 to 15 of the PLL02A IC, and this is done by applying a positive voltage to one or more of the pins.

A binary system is used with a binary number allocated to each of these pins. For example, pin 15 is 1, pin 14 is 2, pin 13 is 4, pin 10 is 32 and

**Figure 2**



It is unfortunate that the maximum frequency that can be fed in at pin 2 is about 4 MHz. This is overcome by

so on as indicated in the chart below showing the pin allocations. If pins 15 and 12 are connected to positive then



the programmed number is 9, the binary numbers being added.

The binary number for channel 19 is 233, which is 1 + 8 + 32 + 64 + 128, or pins 15, 12, 10, 9 and 8. This can be confirmed by selecting channel 19 and measuring the voltages at the pins 7 to 15.

A quick and easy modification is to isolate pin 8 from the track and this, at channel 19, now gives a binary number of 105 with an operating frequency of 28.465 MHz.

Before doing any modifications, find test point 1, which is located above and close to the PLL02A, select channel 19 and measure the voltage at the test point. It should be close to 3v.

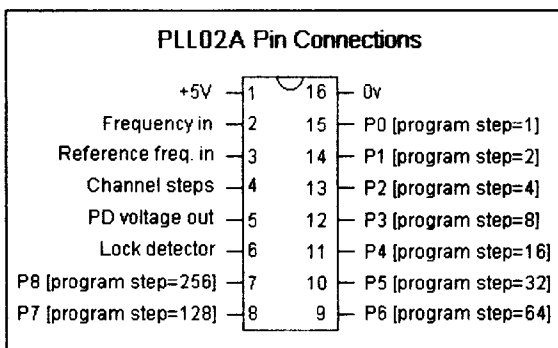
To the right of this you will notice a metal can about 15 x 35 mm with an adjusting slug on the top. The slug adjusts the inductance in the VCO.

Once a modification has been done,

by either replacing the crystal or reprogramming the PLL02A, the channel switch should be turned to the centre of the frequencies to be used and the voltage measured at test point 1.

The voltage will have changed from the first measurement and this must be brought to the voltage originally measured at test point 1 by adjusting the slug at the top of the metal can.

The adjustment is normally very slight and *within 1 turn*. Start by *unscrewing*. **Do not use a metal screwdriver** – make one from an old plastic knitting needle to fit neatly in the slot of the slug. *Be warned, the slugs crack very easily and become almost impossible to adjust or remove.*



■ In a following QSX we will give information on other PLL IC's and how to make the clarifier live on transmit as well as receive. ■

**I always wanted to become a procrastinator, but I kept putting it off.**

## *Greetings from an old Friend*

OM Bud Voortman ZS1B, ex ZS2CA, sends a cheery "hello" to all at PEARS. In a packet message to Ken ZS2BWB he says he still regards his time in PE as some of his best years in ham radio. He writes: "Where else do you get a chance to share a double bed during an Algoa Rally with the likes of my friend the "kraut" Wolfgang Gerstle ZS2WG?!!! Or

alternatively, to track the DF hunt station as being in the middle of Algoa Bay!"

Bud hopes to visit PE in the near future and will bring along his slides from his recent official sea jaunts, during which he used some exotic call signs including ZD9 and ZS7. Hopefully we can arrange a get-together to enjoy a show with Bud's inimitable humour. ■

# The FT-101 — The Ultimate Workhorse

ANDRÉ BOTES ZS2ACP \*

**THE FT-101 TRANSCEIVER** was created by Yaesu during 1970 and the first models were sold in 1971. Although the unit was large by today's standards (an Icom 706 would be dwarfed by this 14 kg brute!) and contained a built-in AC power supply, it could also operate from 12v DC and was often used for mobile work.

Many different models were manufactured, i.e. the 101-B, 101E, 101DX and the 101ZD that sported a digital readout. Because of power restrictions in Japan, certain models were manufactured with a single output tube that limited the output power to 50 watts.

The 6JS6 output valves have become very difficult to obtain and the modification to 6146 tubes by Roger ZS1J has been welcomed by many.

Recently, quite a few local (ZS) amateurs have shown an interest in restoring FT-101s and forming an interest group/club to exchange technical information on the repair and modification of these old but reliable

**Join the FT-101 Club and give your trusty workhorse a new lease on life**

members who join the club. To this end, **an appeal is made to anyone who has an old FT-101 beyond repair or parts thereof to donate them to the club.**

Anyone interested in joining the club can contact me for further details. A very smart certificate reflecting the serial number of the FT-101 that you are using will be issued on acceptance to the club.

\* Tel. [041] 73-2058  
3 Marisa Street  
Kraggakamma Park  
Port Elizabeth

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## **BEAUTY & BEAST AT BATHURST...**



Addressing the crowd at Bathurst on 16 June (*left*), Hans Potgieter ZS6ALJ, President of the SARL impressed with his friendly, down-to-earth disposition and promise of openness in running the League.

By contrast, your raving photographer was threatened and verbally abused by Louis Saunders ZS2CB of Despatch (*right*), practising his Sean Connery look, but not very successfully. The glasses are OK, but the rest is a total disaster. [Photo retouched. Original too awful to print]



# DEARStalk

## BATHURST BASH

Wow! Wasn't that *sumpin'*? Well over 80 happy attendees turned up at the get-together at the smallholding QTH of Neville ZS2NV in Bathurst on 16 June. They came from EL, Kowie, Grahamstown, Adelaide, PE, Uitenhage, Despatch and JayBay as well as places in between. Some 36 cars were counted.

SARL President Hans Potgieter ZS6ALJ clearly enjoyed himself, and the ZS2's took turns to chat animatedly with him about matters of common interest. He addressed all present, explaining his vision for Amateur Radio and the League and most, perhaps all, of the large audience came away with confidence in his ability to pull things right. Let us support him in his endeavours.

We were entertained to great, professional-quality, foot-tapping music with *harmonious*, Q5 vocals by Ewalt ZS2EHB (keyboard), André ZS2ACP and Johan Harmse ZS2HH (guitars), performing off the cuff as the "Single Side Band". They do not play together regularly, which news came as a surprise.

Later in the day our Chairman, Chris ZS2AAW grabbed a guitar, adjusted his G-string and, accompanying the group for a few numbers, acquitted himself with distinction. Perhaps a homebrew musical evening is indicated for an enjoyable event on our social calendar!

■ *Neville, our host, has asked those who were capturing the bash on video to let him have a copy. Thanks.*

## NEW UK PREFIXES

Special UK prefixes will be in use by Scottish and Welsh amateurs until 31 July. They were approved in recognition of the elections in Scotland and Wales in May and the convening of the new Scottish Parliament and Welsh Assembly in July.

In Scotland, GM stations may use 2S and MM prefixes may use 2A, while 2T may be used by Novices.

In Wales, 2C will be used by GW stations, 2X by MW operators and 2Y by Novices.

Until now, the "2" prefix has been used for UK Novice licensees only.

## NEW LOOK FOR MONTHLY MEETINGS

Following a proposal by Neil ZR2NT, it was agreed to alternate technical discussions with other talks at our monthly general meetings. These are not expected to be deeply technical but should prove interesting to all hams – especially if you have an enquiring mind!

We will hopefully soon have a general discussion on the use of Program Imbedded Controllers (PICs) and touch on the way they can be programmed to do an amazing range of things in a circuit. A PIC Interest Group has already begun additional get-togethers to go into the subject more deeply.

It seems that PICs have an immense range of uses in this technological age and the discussions should be extremely interesting, even (perhaps especially) for the less

technical devotee.

## WHILE ON THE SUBJECT...

Although it seems to be a common, widespread phenomenon, the attendance at our meetings has dropped off from the 45 to 50 regulars of a year ago to a mere half of that or less today.

**Why? Are our meetings boring?** There really is not a lot of business – the essentials are disposed of in a half hour and often less.

**Don't we have interesting speakers?** It is a real problem to find outsiders to talk to us on interesting subjects and you have probably heard all our own members' stories already. *If you can suggest any possible speakers or even, perhaps, suitable videos, please tell Cyril ZR2H, whose unhappy job it is to find someone.*

**Don't we cover subjects of interest to you** or the cross-section of members? Here, again, *please* tell Cyril what you would like us to cover.

**Why do we see hardly any of the newer hams** at our functions? PEARS went to a lot of trouble to help many newcomers to qualify for their licences but they do not return the compliment by supporting the Club.

What must we do to attract them? At various times, one or other younger member has enthusiastically gathered a number of his peers into an informal group and arranged various activities. These were usually braais or outings but were seldom, if ever, ham-related functions. If used at all, the radios were merely there to keep the group in touch.

The activities of the groups did not include, or succeed in encouraging, regular attendance of the official PEARS meetings or functions. Eventually the younger set's activities fizzled out too. Does this tell us

something? We'd like to hear from the younger members what they would like us to do to maintain their interest. Do you want guidance on setting up a station, operating or anything else? Is there something you *don't* want us to do?

Remember, this is *your* Society! We *need* you and want you to be satisfied. We will *not* be upset if you tell us where we're falling short – in fact, we beg your input. *If you prefer, drop us a line to PO Box 10402 Linton Grange 6015. You do not need to identify yourself!*

## TECHNICAL CLASSES START

Classes for those wishing to write the RAE in November have started and Viv, the lecturer, was pleased to note the enthusiasm of the group at the first session. However, only one student attended the second class and it is hoped that the others have not decided to drop out.

We welcome the students (or is the politically correct term now "learners"?). We hope they will enjoy the course and pass the exam with flying colours.

Our thanks to Viv for the work he always puts into these courses. His amiable manner has much to do with the ease with which students usually assimilate the information.

If you know of anyone who would like to attend the course it is not too late to enrol, but get him or her to do it *now!* Time marches on!

## DELIVERY OF QSX

If you are not receiving QSX, or if it is regularly delivered to an incorrect address, please let Trevor ZS2AE know. He handles the collation, addressing and distribution of the

Newsletter and needs to know when an address has changed. See the inside cover of QSX for his telephone number.

Please always remember to notify the Society of any change in your contact address (residential or postal) – and also in your marital status, with spouse's name, birthday and your anniversary date so that we can mention your important days in the personal columns.

## SUNSAT

SUNSAT will continue to be available to Radio Amateurs in Southern Africa on Sundays. The uplink is on 436,291 and the downlink on 145,825kHz.

## HAM RADIO ON THE INTERNATIONAL SPACE STATION

Past astronaut Owen Garriott, W5LFL – the first ham to use Amateur Radio from outer space – predicts that Phase 3D and the Amateur Radio on the International Space Station (ARISS) projects will change the face of ham radio. "Educational value, technical value, it's all there right in front of us," he says of P3D and ARISS.

Garriott pointed out that Phase 3D's eccentric orbit will make it visible from large portions of Earth for long periods of time. "P3D is going to open up a whole new opportunity that we did not have in low-Earth orbit like the space station or other low-altitude OSCARs," he said. He also says that astronauts on the ISS could include a brief daily ARISS transmission from the perspective of space aimed at school-agers "to stir up even more interest in our young people" about Amateur Radio.

In 1983 there were two astronaut-

hams, Tony England, W00RE, and himself. *Today there are more than 80 astro-hams*, and Garriott is looking forward to Amateur Radio's playing a major role aboard the ISS.

## GOT YOUR LICENCE YET?

In case you don't read the minutes of the monthly meeting after all the trouble I go to to print them, here's a reminder as to what you should do if you renewed your licence but have not yet received the renewal document from SATRA.

Take your receipt or proof of payment (cheque stub, for example) to the local SATRA office (Norwich Union Building on the Market Square, opposite the City Hall). The official there will interrogate the SATRA computer and solve your problem on the spot.

If you can't get to SATRA PE personally, a telephone call to (041) 585-8321 might do the trick. ■

*Siighhh!* They won't let me join the Wrinkly Ravers. They say it doesn't matter *how erudite* you look, you *gotta* match at least 85% of the Chief Wrinkly One's *CPLF* (Corrugations per linear foot.)



(Tks to André ZS2ACP for the pic and idea—Ed)

**Condolences** — We learned with sadness of the passing on 21 June of Rudi van der Elst, ZS2EE, of Port Alfred. We understand that he had been ill for some time. To his wife and family we offer our condolences.

Our sympathy goes also to Gail and Chick Mosley, now in the UK, on the passing of Gail's mother on 4 June.

## Congratulations...

### on your birthdays:

#### *July*

- 19 Bill Browne ZS2BY
- 19 Arthur Baynes ZR2ARB
- 20 Vic Olivier ZS2SZ
- 22 Beavan Gwilt ZS2RL
- 23 Des Herselman ZR2DH
- 26 Daniel Burger ZS2DSB
- 29 Des Pettit ZS2ABU

#### *August*

- 2 Sharon Layton ZS2SL
- 6 Julia Atteridge XYL of Bill ZS2V
- 9 Pat Bartlett ZR2DA
- 15 Annamarie Barnard ZS2Q
- 18 Al Akers ZS2U
- 21 Martie Borello XYL of Richard ZR2RB

### on your anniversaries:

#### *July*

None in this QSX period (18 July to 21 August)

#### *August*

- 9 Annamarie & Attie Barnard ZS2Q
- 18 Margaret ZR2BCG & Jim France ZR2JRF
- 20 Ria & Paul de Vos ZS2ABY



**Welcome:** Hearty welcome to new members Tony Abrams (an RAE student) and Johan Terblanche ZS2JST of Mossel Bay.

**Travelling:** What, Again? On 16 July Dick Schönborn ZS2RS is off to the UK again for a couple of weeks, and will miss the VW Rally. Dick, some time you'll have to enthral us with a talk on what it is *there* that's more exciting than rally comms!

**Change of Phone numbers:** Due to a delay in Telkom's plans, the Treasurer's telephone number quoted on page 15 last month has to be zapped back to the original. See page 15 now ←

**Serious Omission:** Last month the stupid computer failed to bring out, of all things, the birth date of our revered friend Pieter Liebenberg, ZS2PL, who celebrates his birthday on 28 June. Congrats, Pieter – of course, by now we know that you had a good one. Please stick around and enjoy a lot more with us, old friend! ■

# Your Society's Committee

Chairman, Repeaters, Packet.....	Chris Scarr ZS2AAW	38-1344
Vice Chairman, Secretary .....	Beavan Gwilt ZS2RL	360-6968
Treasurer, Assets Control.....	Clive Fife ZS2RT	32-3203
Awards, Refreshments.....	Bill Hodges ZS2ABZ	581-2580
QSX Editor .....	Garth Laaks ZS2HB	38-1101
e-mail the Editor at.....	glaaks@iafrica.com	
QSX Collation/Distribution, repeaters, packet .....	Trevor Scarr ZS2AE	32-1746
Technical Classes (convening/administration).....	Cyril Hislop ZR2H	360-8482
Technical Classes (lectures) .....	Viv Moore	360-4433
Librarian .....	Neil Thomas	
Special Events, Social.....	Cyril Hislop ZR2H	360-8482

## PEARS' VHF/UHF & Other Services

### REPEATERS

Town VHF .....	# 145,050/650	Kareedouw .....	† 145,125/725
Town UHF .....	# 431,050/438,650	Knysna .....	* 145,075/675
Cockscomb .....	145,000/600	Lady's Slipper.....	* 145,100/700
Cradock .....	* 145,050/650	Uitenhage .....	# 145,075/675
Grahamstown .....	* 145,150/750	Theescombe .....	† 145,175/775

\* These form PE's long-range 2-metre repeater system, to which the East London 145.125/725 MHz repeater and the George repeater on 145,100/700 are also linked. # These can also be linked as required. † These are privately owned repeaters and are not included in the PEARS linked repeater system.

### 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) (horizontally polarized, 160W ERP) .....	144,410
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
Web Site .....	pears.8m.com

## 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 and environs as well as Cradock via the linked repeater system described above. PEARS' 7098 or 3640 kHz transceive facilities are also remotely linked as needed. In addition, the SARL's 40m transmissions on 7082 or 7066 kHz, alternatively 7070 kHz, can be remotely patched into the 2m network, either in receive-only mode or for full transceive capability for interactive events.

Date	Prepare and Read on 2m Repeater link
11 July	ZS2AAW
18	ZS2HB
25	ZS2RT
1 August	ZS2ABZ
8	ZS2RL
15	ZS2AE

### DIARY DATES

#### JULY

11 SARL 2M QSO Party  
**14 PEARS monthly meeting**  
 16/17 VW Algoa Rally

#### AUGUST

5 Wrinkly Rave  
 14 SARL HF Phone contest

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