

THIS NEWSLETTER IS PUBLISHED BY THE
PORT ELIZABETH AMATEUR RADIO SOCIETY

P.O. BOX 10402
LINTON GRANGE
6015

December 1998

IMPORTANT – NO CLUB MEETING

Please note that there will be *no monthly general meeting* of the Society this month. This is the usual arrangement at this time of the year because of the numerous other activities that members will wish to attend, and because many members would be away on holiday on the usual meeting night.

The next meeting, therefore, will be on JANUARY 15th 1999.
Please make a note of it in your diary.

EVEN MORE IMPORTANT – PLEASE READ CAREFULLY!

Wrinkly Ravers

It has been suggested that we have our next rave - our first in 1999, on Thursday 7 January - at the holiday QTH of Julie and Trevor Scarr at Bushman's River Mouth in the form of a bring and braai. Wrinklies from the surrounding district would be invited to join us.

Please let Ken Tremeer (Tel. 66-1786) know without delay how it grabs you. If it is not favoured by the majority of Wrinklies, we will meet at our usual spot. Please listen to bulletins for further information.

The Editor and willing helpers of QSX-PE wish all readers and their families, our contributors and our friendly printers at Instant Printing, a

Merry Christmas



and a

Happy and Peaceful 1999



A Word From the Chair

CHRISTMAS CHEER ABOUND – it's already “that time of the year”! Hard to believe that another year is almost over. Although the commercial sector makes good profit out of this time of year, I also enjoy it, but for a totally different reason. For it is a time when people get together simply to socialise – as we did at the PEARS Christmas lunch held at the Zwartkops Yacht Club.

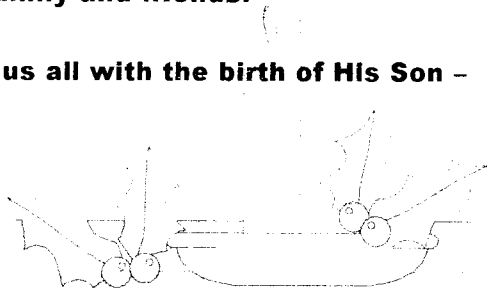
What a pleasant event it was, and added to it was the privilege of awarding Honorary Life Membership to two of our long-standing hams, Van, ZS2Y and Bill, ZS2BY. They were presented with fine certificates crafted by our QSX editor, and handed over by yours truly.

While there is much merriment around for the next few weeks, please take care of yourself, and be aware of the foolishness of others who may have over-indulged. Take care over the holiday season, and if you are taking time off, enjoy your rest. Most of all, enjoy the time spent with family and friends.

May God bless you, as He did us all with the birth of His Son – that's Christmas, after all!

73,

Chris, ZS2AAW



HAMNET/ECARES wishes all its members a very merry Christmas and a prosperous and successful New Year.

We are sorry to say farewell to Allan Bent ZS2BBR, who has moved to Cape Town.

We wish a warm welcome to Marc Gatley ZR2BLK and Saney Martin ZR1S, who have joined ECARES.



Although Emergency Procedures was published in QSX about two years ago, we have subsequently had a fairly large influx of new members and it thus bears repeating.

EMERGENCY PROCEDURES

Do not presume that Hamnet/ECARES must be pro-active whenever circumstances arise. This is not altogether true. There are a number of professional or statutory bodies who deal with emergencies at first hand and, due to their specialist training, are far better suited and empowered to such tasks. Hamnet/ECARES can and will assist such bodies, but only if called upon to do so.

Lost Children

Here the SAPS are the co-ordinators in command. Again, they will call on Hamnet/ECARES for assistance only when required.

Floods and Natural Disasters

Such incidents are normally co-ordinated by Disaster Management in the Local Authority area where the disaster has occurred. Assistance from adjoining areas or on a Provincial or National basis will be activated by Disaster Management as circumstances dictate. SATEPSA co-ordinates the various bodies that are needed and again Hamnet/ECARES will be activated on request.

Immediate Incidents

These include motor accidents, fires,

medical emergencies, etc. Hams are often the first on the scene and our prime function is to alert the necessary emergency services (fire, ambulance and/or traffic) to pass accurate and immediate information, ensuring a quick response. Hamnet/ECARES can assist in safety at the scene, rendering first aid, traffic control, etc., but once the emergency services arrive, Hamnet/ECARES takes a secondary role and only if instructed by the on-site commander may we be tasked to assist further or be stood down.

In all these incidents Hamnet/ECARES acts firstly as direct or secondary communications facility. They are not peace officers and should never exceed their authority, which is no more or no less than any other private citizen, unless instructed to act by a policeman or the Chief Fire Officer (or his deputy) all of whom have statutory powers to call on any person to assist them.

Hamnet sits on the National SATEPSA, SASAR (South African Search and Rescue) and ARCC (Air Rescue Control Centre) Committees and liaises on a national basis with the SAPS, SANDF and other bodies. At Provincial and Local Authority level, Hamnet/ECARES liaises with all the emergency services. This means that Hamnet/ECARES is known to all the necessary role players in emergency situations and will be called out to assist if the circumstances arise.

The prime point to remember is that, if you are the first person to become aware of an incident, you must immediately alert the necessary emergency services and then your Hamnet/ECARES Provincial Director or his Deputy, who will then co-ordinate the activities that follow, decide on when to activate more Hamnet/ECARES personnel, act as net control and liaise with the necessary authorities to whom he or she is probably personally known. Do not act alone or try to activate a Hamnet/ECARES response on your own. Let the persons authorised to do so do their jobs. Failure to take such actions can open you to legal liability and responsibility which could cost you dearly and neither Hamnet, the SARL nor ECARES will be able to help you.

Ships in Distress

Such emergencies are handled by SASAR and the ARCC either at Johannesburg International Airport or at Silvermine in the Cape. Hams often hear the first distress calls and need:

- a) to obtain the key data from the vessel
- b) to alert the nearest port captain or Silvermine directly if necessary.
- c) stand by to monitor and/or relay information if requested to do so.

Lost or Downed Aircraft

SASAR and the ARCC deal with these situations. The ARCC welcomes reports and is geared to plan search and rescue operations.

Only when the circumstances arise will Hamnet/ECARES be alerted to assist. The ARCC first gather data on the plane, its flight plan, last known position, etc., establishing a probable search area. The police stations in this area are then alerted to establish if ground sightings have been made and, when the area is more defined, the search proper is initiated.

73

Al Akers ZS2U

Provincial Director,

Hamnet East Cape/ECARES

'Twas the Night Before Contest

BY **K7FD**

'Twas the night before Contest and all through the house,
not a keyboard was stirring, not even a mouse.
The antennas hung by their masts in despair
with hopes that big signals soon would be there.

And the op's were nestled all snug in their beds,
while visions of DX danced in their heads.
Then at 00:00 zulu there arose such a clatter,
I sprang from my bed to see what was the matter!

And what to my wondering eyes should appear,
but a Jolly Old Fellow -- sending code loud and clear!
His fingers glowed with experience so rare,
he turned out great code with a brass pounder's flair.

More rapid than bullets -- dots and dashes they came,
and he pounded and clicked and called them by name:

On Twenty! On Frequency! On Zero Beat!
On Kenwood! On ICOM! On QSO's complete!

His eyes glazed over, fingers nimble and lean
from weekends and nights -- his CW was mean!
A wink of his eye and twist of his head
soon gave me to know his score was ahead.

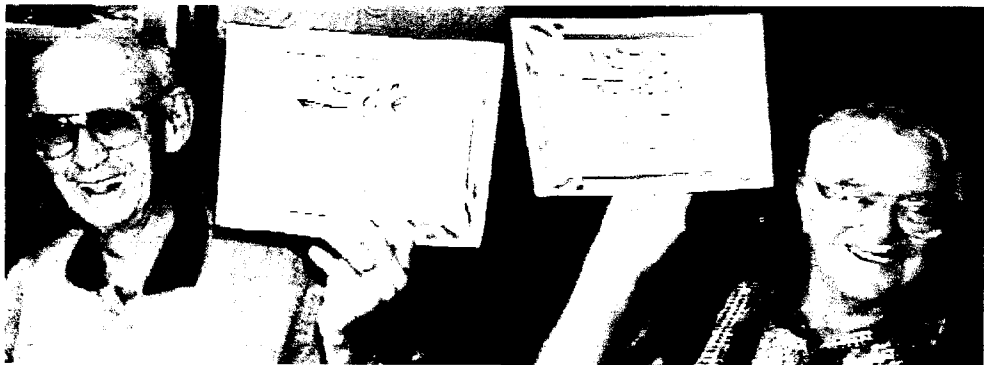
He spoke not a word, but went straight to his work
turning carrier into code, then turned with a jerk,
and laying his finger upon the brass key
he smiled and logged another -- QSO #923!

The signals all faded; the bands were depleted.
The runs were gone, last exchanges completed.
He made each contact and awaited the final bell
with nary a bend, and all had gone well.

The contest was finished, another effort concluded,
and last minute changes were even included.
And he exclaimed with a laugh and great good cheer
"Maybe not this time, but wait 'til next year!"



PEARS HONOURS TWO STALWARTS



Schalk van der Merwe ZS2Y (left) and Bill Browne ZS2BY (right) hold aloft their PEARs Honorary Life Membership certificates


FOLLOWING THE AMENDMENT of our Constitution at the last AGM and a subsequent decision taken at a Society meeting, Honorary Life Membership has been bestowed on Schalk van der Merwe ZS2Y and Bill Browne ZS2BY in recognition of their service to the Society and Amateur Radio in general over a period of many years.

Certificates were handed to Schalk and Bill in a ceremony at the PEARs Christmas luncheon held at Zwartkops on 6 December.

Schalk van der Merwe, who acquired his ham licence in 1935, must surely be regarded as our longest-standing member. He initiated the establishment of the Port Elizabeth Radio Association after the end of WW2. When the SARL was resuscitated, having been in limbo during the war, PERA became the PE Branch of the

League. Together with the late Rex Bosman ZS2X, Schalk created the Branch's first newsletter, QSX-PE, in February 1946 and for some time edited it.

Bill Browne was also a member of the old PE Branch for several years. While serving in the Department of Posts & Telecommunications Head Office in Pretoria he was responsible for technical radio matters and regularly attended ITU and other conferences around the world. He looked after the interests of Amateur Radio whenever the opportunity arose. It fell to Bill's lot to devise the first RAE technical examination.

PEARs salutes these two members, true role models in every respect. We thank them for their contribution to Amateur Radio, and trust that they will be with us for many more years. 

VHF/UHF CONTEST 16-17 JANUARY 1999

The Port Elizabeth Amateur Radio Society is sponsoring a new national VHF/UHF contest which takes place from Saturday 0000 SAST until Sunday 2359 SAST (48 hours) on 16-17 January 1999. This is the best time of the year for VHF/UHF propagation.

There are four categories:

- (a) Fixed station
- (b) Field station
- (c) Club station (multi-operator) and
- (d) QRP station (2 Metres FM only, maximum 10 Watts).

Scoring: (a), (b) and (c): one point per kilometre; (d): ten points per *contact*.

Although different categories may work each other and score from such contacts, they can only *compete* in their own category and division. However, the long distance competition of the contest on each band is open to all four categories (a), (b), (c) and, on two metres only, (d).

The frequency channels are:

50,200-50,250 MHz	SSB/CW
50,450-50,500 MHz	FM
144,200-144,250 MHz	SSB/CW

144,450-144,500 MHz	FM
145,450-145,550 MHz	FM
432,200-432,250 MHz	SSB/CW
433,450-433,500 MHz	FM

A contact constitutes the exchange of call signs, signal reports and location (city/town or co-ordinates or Maidenhead locator).

The following neighbouring countries are invited to participate and enable contact points to be claimed by RSA stations who work them:


V5, A2, Z2, C9, 7P and 3DA.

Separate log sheets for each band must be mailed within 30 days to:

The PE Amateur Radio Society
PO Box 10402
LINTON GRANGE
6015 Port Elizabeth.

The Society's decision will be final.

For further details including awards, see the October 1998 issue of RADIO ZS or download the rules from the PEARS web site: pears.8m.com

You may also call Mike ZS2FM on Cell 082 654 0623. 

Who's Who in the Zoo?

Here are a couple of photographs of local yokels. Can you identify them?

The guy below is obviously quite broad-minded, enjoying the occasional skylark, but his name got scrambled as SEA LARK.

On the right, we have a hairier and slightly younger member who's practising to be a branch manager, as you can see from this fine view of him in his absailing broekie and gear. Appropriately, I suppose, *his* name is an anagram for DOWN CRASHER.

[Hint: he fell off his horse recently and readers were asked to remount him]



VHF IN THE EASTERN CAPE

BY MIKE BOSCH ZS2FM

Mike Bosch ZS2FM and Paul Smit ZS6PJS of Pietersburg made history on 17 November when they established the first South African contact on 2 Metres via Meteor Scatter. We persuaded Mike to let us have a run-down on the historic QSO as well as other happenings on VHF.

The Leonids Meteor Shower

The once in a lifetime (for some) meteor scatter conditions occurred during the Leonids meteor shower on November 17. The writer had run many 2 Metre skeds in the past with Division 6 stations but could never quite make the grade due to the shortness of the meteor bursts coupled with our power limits. So the main objective was to make a complete QSO on 2 Metre Meteor Scatter during this shower.

Around 0200 SAST on November 17 the six Metre beacons ZS6DN 50,050 MHz from Irene and ZS6TWB 50,044 in Pietersburg were already peaking up to S9 on bursts that persisted for five minutes or more at times.

A sked was previously arranged with ZS6PJS Paul Smit of Pietersburg on 144,305 MHz at 0315 SAST. At 0310 SAST the writer heard ZS6PJS tuning up on SSB and at 0312 SAST called him, and we established that historic first 2 Metre Meteor Scatter QSO in the RSA, over a distance of 1178 km. This time it was so easy – almost a let-down!

Later, two more 2 Metre stations were worked, ZS6PT Peter Sykora, who was ZS8MI on Marion Island some years ago, and the incomparable 83 year old ZS6HS Bert Howes, who in 1937 picked up the longest distance TV sound signal in

the world from Alexandra Palace, London, when he was still resident in Cape Town.

The 2 Metre record lasted about two hours when it was broken by ZS6PT, when he hooked up with ZR1EV Shawn Baris in Brackenfell near Cape Town. Minutes later, the record was smashed again when ZS6PJS also worked ZR1EV to establish the present record of 1520 km.

Meanwhile, back at the ranch (meaning 6 Metres), the beacons were romping in almost continuously at S9 plus, and a cacophony of SSB signals and QRM from Division 6 stations were audible on 50,200 MHz that sounded like twenty metres. ZS2ACP André was having a field day as he knocked off no fewer than 23 stations from around the country, followed by ZR2T Alex who logged 13 stations.

In East London, ZS2CR Colin made his debut on meteor scatter when he worked Divisions 1, 2, 5 and 6. All three stations also made several FM contacts and were surprised at the quality. Congrats, guys and very FB!

The writer contacted a few stations on 6 Metres, including ZS6PT Peter on 50,450 MHz FM. Having stayed up three nights in a row to monitor conditions and having made many 6 Metre Meteor Scatter contacts over the years, the writer decided that

mission was accomplished and went to bed at 0500 SAST. Although no 6 Metre records were broken, it was still the most memorable night in the history of Meteor Scatter!

The 144,450 MHz "DX" Net

Activity is again increasing on this FM channel at night from 2100 SAST (9 pm) and occasionally also around 1800 SAST (6 pm). A number of East London stations have been worked. They are: ZR2AC Brian, ZR2NB Nick, ZR2REG Reg, ZS2ABF Peter, ZS2AH John, ZS2CR Colin, and ZS2IV Ralph.

ZS2NR Neville of King William's Town has been copied and ZS2D Dirk of Jeffreys Bay already worked East London, a distance of over 300 km.

Local operators are: ZR2JRF Jim, ZR2T Alex, ZS2ABU Des, ZS2ACP André, ZS2FM Mike, ZS2HB Garth, and ZS2U Al. The call signs underlined are already horizontally polarized. Watch out for super Tropo openings in December and January months!

Six Metre Nets

Some activity is beginning to start

up on 50,450 MHz too. Recently ZS2ACP André worked ZS1J Roger in Plettenberg Bay. ZS2EHB Ewald of Despatch and ZS2CR Colin of East London both contacted ZS2ACP and ZS2FM in PE. ZR2LG Gary in The Craggs and ZS1M Chris in Mosselbay are also active on this frequency.

NOTE: There are about 40 amateurs in the Cape Town area on 6 Metres. How about setting up some skeds with them?

A number of hams appear on the local ECARES net on Wednesday evenings on 52,950 MHz FM. They are: ZR2BLK Marc, ZR2JRD Jim, ZR2JRF Jim, ZR2NDT Nicholas, ZR2NT Neil, ZS2ABU Des, ZS2BH Bryan, ZS2C Stoffel, ZS2F Mervyn, ZS2FM Mike, ZS2IC Mike, ZS2OC Ken, ZS2PF Peter and ZS2U Al.

Hopefully, some of the above hams will also construct a horizontal dipole or preferably a beam and QSY to 50,450 MHz FM during the forthcoming VHF and UHF contest on 16-17 January 1999.

See you there!



FOR SALE



WANTED



SWOP

FOR SALE

* Icom IC-2710H **dual-band** (2m/70cm) **mobile FM transceiver**, 50W VHF, 35W UHF, removable face plate, includes manual, microphone, power lead, only 2 months old, still under guarantee – R3000 — Shawn Corder, tel 360-7369.

FOR SALE OR SWOP

* **FR100 receiver, matching FL200 transmitter** in working order. Offers considered, or will swop for e.g. a 2 Metre rig or a 40 Metre verticle antenna suitable for use in a flat — Cedric Bendeman, tel. 360-8101.

WANTED

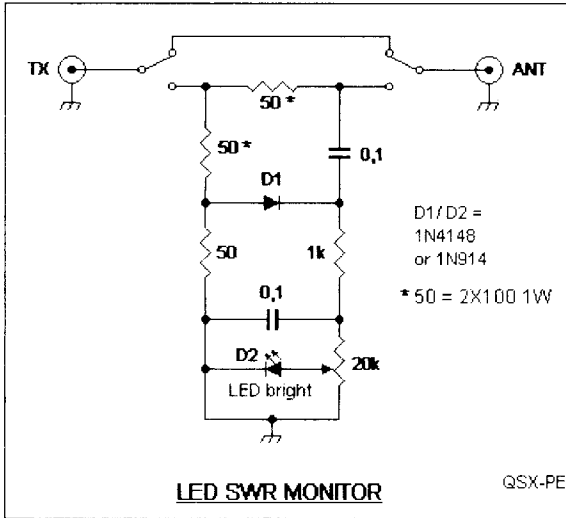
* **UHF transceiver** (preferably Icom, all-mode) but will consider any UHF rig — Ralph Hall ZS2IV, tel. 0431 945-2644, Cell 082-954 0409, or via packet.

LED STANDING WAVE INDICATOR

FROM G-QRP CLUB'S SPRAT, AUTUMN 1998

John Young, G0WQR, offered this little circuit to the readers of SPRAT 93. The basic circuit, which can be mounted on a small PCB, is that of a resistive SWR bridge.

The superbright LED is remarkable in that it will still glow when dissipating currents of 10 microamps or less. As the antenna is tuned for minimum VSWR, the superbright LED will extinguish.



The preset provides a sensitivity control and the indicator will work with signals to below 1 watt.

BUT...switch out the circuit after tuning up and before transmitting.

(Remember too that **this circuit is intended for QRP fans** – don't put more than a watt or two through it!–Ed.)

REAL SPREAD FOR 80Mtr VXO

The problem with trying to pull the frequency of an 80 metre crystal oscillator is that it can only be moved 2 or 3 kHz. Higher frequency crystals can be shifted much more, so why not take two high frequency crystals, one fixed and one variable, mix them and, by subtraction, get a low frequency generated with a larger swing?

With the circuit shown, the difference is 3582 kHz and in the test circuit tuned from 3509 to 3587 kHz with a rock steady output, drawing 7.5 mA from a 9 volt supply. X1 is a 17642 kHz crystal, and X2 oscillates at 14060 kHz, but any suitable combination can be used.

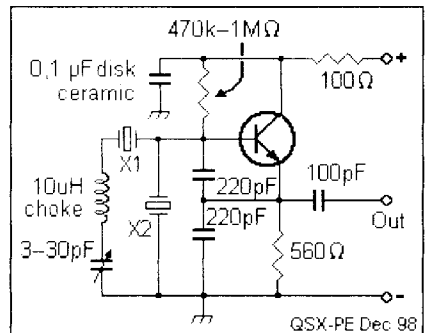
The transistor oscillates on two frequencies simultaneously and the difference is taken from the emitter. A filter to remove the undesirable mixtures should follow.

V+ up to 13.8V

220 & 100 pF caps are polystyrene

Select 470k–1MΩ resistor for best oscillation.

Transistor is any HF silicon (e.g. 2N2222A)



YET ANOTHER NICAD CHARGER

Many nicad charging circuits have been published in QSX and it appears to be a subject of more than passing interest for many of our readers.

BY ANDRÉ BOTES ZS2ACP

Many years ago I came across a circuit where the LM340T5 (7805), a fixed 5-volt regulator, was used as a constant current charger for nicad batteries and I have used this unit ever since.

The manufacturers of nicads normally claim that these batteries should be charged at one tenth of their Ah or mAh rating (i.e. a 500 mAh battery pack would be charged at 50 mA for 10 hours after the battery has been totally drained).

The beauty of the circuit shown here is that one does not have to adjust voltages for different size

battery packs, merely adjust the current as explained above.

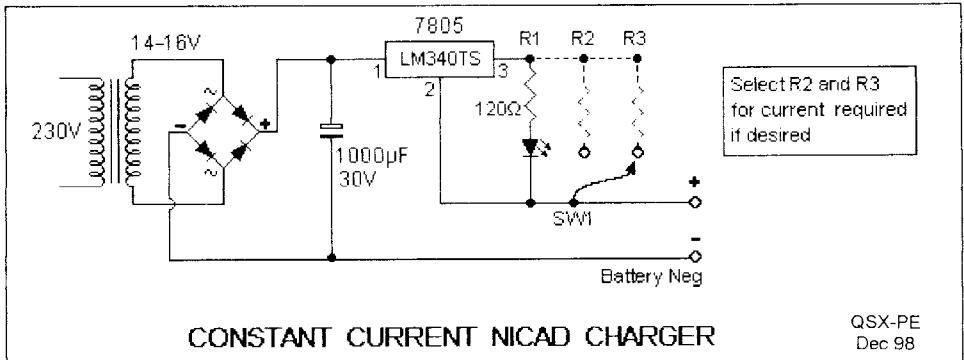
I have included a switch which allows me the selection of 20, 80 or 100 mA.

Remember to use a transformer that can supply the charge current comfortably and at least 3 volts higher than the largest battery to be charged.

Mount the regulator on a heatsink or the side of the metal cabinet, using a mica insulating washer.

The LED will light up when the battery is connected and this indicates that current is flowing.

Happy charging!



With the recent work done on some sites forming the Eastern Cape Repeater network, it seems fitting to update our members with the latest progress.

The most persistent of problems this year has to be that of the Grahamstown repeater, which generates "crackle" on any incoming signals on 145.150MHz. This has been evident since the duplexer was fitted, and RF from the transmitter is radiated from the same antenna that is used by the receiver. Any bad connections within the antenna produce annoying crackles, which sometimes wipe out the weaker signals.

A change of antenna did not solve the problem, as a similar design colinear was used, which turned out to have the same problem.

The original antenna has been opened and inspected carefully. Major corrosion between dissimilar metals has been identified as the cause of the trouble, and this will be treated, and re-tuned, and then re-installed at Grahamstown.

The antenna on site at present seems to be lacking in performance, so I hope that the repeater is back to its original spec when the original re-worked antenna is fitted.

Link to East London

Also suffering from the exposure to the elements is the 12-el UHF link yagi towards East London. With the recent rains, moisture has affected the VSWR, causing the link to be of poor quality. This will be replaced when

the colinear is refitted at the next opportunity.

Knysna

The Knysna repeater appears to be suffering from lack of attention, with the repeater chopping badly on any incoming link traffic from PE or George.

This can be attributed to the VHF repeater receiver opening up when incoming link signals cause the repeater transmitter to key up. This tends to indicate a "dirty" VHF transmitted signal on 145.675, which is opening its own receiver.

If the repeater is used on its own, the receiver is kept busy picking up the incoming signal, and the repeater works fine. It is at present operating as a stand-alone unit – the joys of having DTMF control!

This repeater will be paid a visit in the very near future, to do some routine maintenance such as antenna checks, VSWR checks, and spectrum analyzer checks. The faulty repeater will either be aligned on-site, or replaced.

A modification will be brought into effect at Knysna, which will kill the repeater receiver whenever any incoming link traffic keys the transmitter, so we will hopefully stop any future intermod signals from getting into the system at the 675 Knysna repeater.

Lady's Slipper

Lady's Slipper has eventually seen the installation of the 6m link onto the network. The link is, however, subject to much ramming from all the

commercial RF on-site, so has also been switched out until suitable filtering has been "lurked" (If anyone has access to a 50MHz cavity pass filter, please contact me).

This 6m link can be switched on for special occasions, or for test purposes, by using the code 7006* (and # to disable it again).

Future improvements to this unit will be the addition of a CTCSS audio filter on the receive audio path, to remove the rough 150Hz tones transmitted by the ex-military rigs that are so plentiful!

It may be a plan to include a 150Hz tone on the transmitted signal for the benefit of these users?

Cradock linked at last

Cradock has been recently installed from scratch – "all in a day's work"!! A marathon effort by those involved, which included 6 hours of travelling time, and almost 12 hours on site. But it all seems to have been worth the effort, as we now have the 145.650 Cradock repeater linked in to Grahamstown as per the last repeater network diagram.

Cradock digipeater

Still to be commissioned is the upgraded packet rig and antenna, but for that we will need the Cradock chaps on site.

Future plans will be to link this Digi as a Rose Switch to the Grahamstown Rose Switch via UHF, to improve services, and limit the clashes the

Cradock digi on 144.675 has with the East London boys on 144.675, as heard by the Grahamstown 144.675 port. (If anyone is running 144.675 within earshot of Grahamstown, the Cradock digi has competition on the channel)

Cape Town link

The link to Cape Town is close at hand. A DTMF switching card was sent to the relevant persons in Cape Town, for use at Riversdale, where they will be installing a VHF repeater and two UHF links, looking at George and Jonaskop near Swellendam.

From Jonaskop to Cape Town is still linked, so once the Riversdale site is installed later this month, we should have a switchable link all along the coast to Cape Town. What a pleasure for coastal travelers!

We are, of course, under some pressure to repair the Knysna problem, or else we may miss the "great switch-on", which has been scheduled for the 17/18th December.

Keep a lookout for a complete Cape Coastal repeater network article early next year, with layout map, once the system has settled in. Also, an updated "official" article for Radio ZS might be a good idea, considering the somewhat incorrect information submitted by a certain ZR6 station

73

Chris, ZS2AAW



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TVI – Who's Fault Is It?

Some ambiguity has existed with regard to the interpretation of Regulation G4 (1) of the Radio Regulations, which provides that "the licensee shall...maintain all radio apparatus at a station technically in a good condition and ensure...that it does not cause interference with the reception and transmissions of other radio users or telecommunication lines."

But what is actually meant by 'cause interference'?

The following ruling furnished in a letter from SATRA to the SARL in July 1997 should help those who are hassled by neighbours who complain of interference to their radios, TV sets or other electronic apparatus.

HOW TO ASSESS WHERE THE FAULT LIES IN AN INTERFERENCE COMPLAINT

The way to determine whether the interference is due to a fault of the transmitting station or the affected equipment is to make the following observations:

- If the transmitter is operating in accordance with the technical parameters specified in the Radio Regulations, it is in all probability not causing interference.


- If the transmitter is not operating in accordance with the regulations, or in the event that the interference can be solved by fitting filters to the transmitter, then the transmitter is at fault and is the cause of the interference complaint. Regulation G4 is then applicable.

- If the interference is in the form of breakthrough on radio (or TV) receiving apparatus and it can be corrected by fitting filters to the receiver, or by correcting deficiencies in the receiver installation, or by substitution of alternative receiving equipment, then the fault lies with the receiving equipment. In this case regulation G4 is not applicable.

- If breakthrough occurs on electronic equipment which does not

incorporate a radio receiver, then the equipment is clearly not intended to respond to radio frequency transmissions and the fault therefore lies in the affected equipment. Regulation G4 is not applicable. (This type of breakthrough can usually be rectified by installing filters to prevent the radio frequency energy from entering the susceptible equipment).

Note: In case of interference to a radiocommunications service by equipment *other than* radio transmitters, the provisions of Chapter 7 and Annexure A "Limits of Interference" of the Radio Regulations are applicable.

□ The whole question of interference was dealt with quite comprehensively in the February 1998 issue of RADIO ZS. The article can also be downloaded from the SARL web site <http://www.sarl.org.za> 

PEARStalk

RAE

From all accounts the RAE was a fair paper. Although PEARS did not run a class this term, two candidates who were tutored personally by Viv ZS2VM wrote the exam locally, and we understand there was a candidate in Grahamstown too. We hope to hear good news from you all soon.

METEOR SHOWER

Well! (pronounced with the Madiba verve). After all the hype about the wonderful view we were supposed to have of the shower of meteors, PE was fully clouded over – as always seems to occur when there is a celestial happening – and we saw zilch.

However, those who managed to stay awake into the early hours had a lot of fun on a couple of mornings with rare VHF radio propagation conditions. See the article elsewhere by Mike Bosch on the experiences.

ZS6HS Bert Howes of Johannesburg reports that he heard the PEARS 2 Metre beacon ZS2VHF on 144,410 MHz between 0300 and 0400 on 17 November.

CW CLASSES COME TO AN END

A big slap on the back goes to Bryan Haefele ZS2BH for the successful completion of his morse classes on the linked repeater system. The Koch method seems to have proved itself, and we hope that there will be a spate of ZR's applying to do their morse tests soon.

To those who are now doing battle with the morse key, we give our usual word of warning – ensure that you learn

from the outset to address the key correctly. If you learn to 'hold' the key properly from the start, you will send more accurately and not get tired. Let one of the CW specialists show you how before you get into the wrong habit!

KEENEST MEMBER?

Last month, Gus Winter ZS2MC rocked up at the clubhouse and the only company he had was the bunch of hobos outside. (How lucky can you get?) When nobody else turned up, and the hobos were disappointingly uncharitable towards him with their communal bottle of *bloutrein*, Gus headed for home. The next day he discovered that he was a week early for the monthly meeting.

ANNIE GET YOUR GUN!

Shades of the Wild West! Right here on our doorstep – in fact, within our very Society – we have a pistol-packing Mamma! That's our Anne Smithers, ZR2XT, who came through as best lady shottist overall in the recent EP championship shoot of the Practical Pistol Association.

Also showing *his* mettle in the standard gun category was our Alex Gogos, ZR2T, who took second overall position.

Hearty congrats, you two.

WHERE ARE THEY NOW?

The question arose again recently: Where have all those new hams gone? They took the trouble to attend RAE classes, write the exam and presumably apply for their licences. We

have heard a handful on the 2 Metre band on a very few occasions, but most just seem to disappear from the scene.

This is not just a local phenomenon, however. Some 300 candidates write the RAE countrywide every year but, from reports we have had, few of them seem to be heard on the air, and even fewer reach the HF bands. Are the RAE tutors wasting their time?

Your Committee would really like to learn the reason for this situation. Is there something that we, as a club, should be doing? Or is the onus on the newcomer to go out and find a mentor, elmer, or adviser? If the Club does not know the newcomer's particular needs, we can not do anything about it.

PROPOSED REGULATIONS

At the request of several members, a special meeting was called to discuss the SARL's proposed new radio regulations, about which many licensed amateurs are still very much in the dark.

Following intense discussion of the various points of concern, it was decided to direct a letter to SARL as well as SATRA to express our feelings.

Among these was the proposal to raise the power output level to 1000 Watts. PEARS feels that the present levels should be maintained for general purposes (some suggested it should actually be reduced to encourage real experimentation by way of improvements in the shack and outside!).

However, PEARS believes that, *for genuine experimentation purposes, e.g. EME and other specialised investigations*, SATRA should consider individual applications on their merits. Successful applicants should be required to furnish reports on their experiments and the results achieved. The approval should be for one year,

renewable annually depending on the results achieved.

The new Novice class (which SARL is now apparently referring to as a 'Learners Licence' should involve passing the RAE regulations paper, an elementary hands-on technical test such as constructing a small item (e.g. a CW transmitter, for which SARL could perhaps supply kits) and a 5 wpm morse test. Operation should be restricted to 160 and 80 Metres on CW or AM and 40 and 10 Metres on CW only.

The SARL seems to have meanwhile revised its proposal along similar lines, except that they envisage 20 instead of 10 Metres. We await details of the modes that SARL wishes to grant but, hopefully, it will not include phone on 40 and 20. It is essential that sufficient incentive be built in to encourage upgrading. It is, after all, a *learner's licence!* It is also not clear whether they still want a 5 wpm CW test for this class.

The SARL reported that they will be polling its members on the proposed new Learners Licence and the reduction in the morse code for access to HF. Polling forms must be returned to reach the SARL not later than 28 December 1998. Those responsible seem to still be unaware – or unconcerned – of postal delays, especially at this time of the year, between Gauteng and the lesser important provinces. Or perhaps they're relying on it!

With regard to the full licence, we recommend that, if a candidate passes the technical examination with a minimum of 85% (but possibly a higher figure would be appropriate) and provided that negative marking is applied for incorrect answers (a full negative point per wrong answer) the

person should be given a full licence.

It will not be recognised abroad, but the candidate is free to undergo the 12 wpm morse test if he wishes to use the reciprocal facilities available to licensees who hold a normal CEPT standard licence.

The regulations designed to permit unlicensed people to operate (e.g. at JOTA events) were dangerously loosely phrased. They need to be very precisely worded in order to prevent problems.

Several other aspects were commented on and counter-proposals offered. Among them was an SARL proviso which we feared might place the control of bulletin transmissions in the hands of the SARL, who would have to approve bulletin stations. Another sought to prohibit recording of QSOs unless the operator doing the recording was himself in the QSO.

HAM RADIO PROGRAM FOR DOS

Bill Browne ZS2BY has developed a very useful and versatile program for amateur radio use. It is very user-friendly and, among other things, can help with your design of power supplies, even to the extent of suggesting wire gauge, core size, optimum windings etc. Antenna design is also a snip with this program, and there are many other ham radio applications.

Bill has developed and updated the program over a period of years. All data accords with internationally accepted recommendations and the best design practices.

CHRISTMAS NET

The SARL plans to hold a special Christmas Net just after midnight on Christmas eve. The net will be on the air at 00:01 on December 25. The HF frequency will be 3718 kHz. Clubs are invited to link in their local repeaters to

the conference bridge and join a nationwide link-up. At this time we do not know whether PEARS will participate, but individuals may, of course, do so via the HF frequency.

SARL AGM 1999

The SARL Council has decided to change the venue of "Hamvention 99" to Radiokop, Johannesburg, following requests from members and affiliated radio clubs. It was originally planned to take place in the Rustenburg area.

The Hamvention will be held on April 23 and 24 and will feature the official opening of the new building followed by a spit braai, the SARL AGM, a huge flea market, a teachers' workshop, a 2m foxhunt, and a mobileers' rally, among other things.

CLUBS TO DISTRIBUTE QSL CARDS?


Following several requests from radio clubs, the SARL Council has decided to encourage Clubs to distribute QSL cards to SARL members in their areas.

SPECIAL MEMBERSHIP OFFER

The SARL has once again introduced special membership offers. An 18 months offer for non-members is for membership till 30 June 2000, Radio ZS and free use of the QSL Bureau (up to 1000 cards) at a cost of R250.

Current members can renew for the 1999 financial year at R155 inclusive of Radio ZS and the QSL Bureau and membership till 30 June 2000.

All new members will receive a membership kit containing a contest guide, special book offers, a membership card, membership certificate and details of SARL awards.

The offers are available till 31 January 1999. Call Michelle ZS6TO at 011 484-2830. 

Condolences—We extend our heartfelt sympathy to Gail Hayes and son Angus on the loss of their husband and father respectively, Bill Hayes ZS2WH, in a motor accident on 7 November. Gail was hospitalized with spinal injuries, while Angus suffered a broken leg. We trust that you are both well on the way to recovery from your injuries.

Congratulations...

on your birthdays:

December

- 20 Marlene Gray XYL of ZS2G
- 20 Marlene Ashwell ZR2ED
- 21 Paul de Vos ZS2ABY
- 21 Ron Grobbelaar ZS2MF
- 23 Noel Hislop XYL of Cyril
- 25 Mike Bosch ZS2FM
- 30 Dirk Ligthelm ZS2D

January

- 7 John Raven ZR2ABH
- 7 Hettie Taylor XYL of ZS2AAX
- 13 Blanka Batt XYL of ZR2BBH
- 15 Neil Fulton ZS2MG

on your anniversaries:

December

- 19 Lida & Dirk Ligthelm ZS2D
- 23 Noel & Cyril Hislop

January

- 1 Maureen Vroom XYL of Neville ZS2NV
- 2 Julie ZR2EY & Trevor Scarr ZS2AE
- 5 Megan & Keith Fensham ZR2KF
- 7 Pat ZR2DA & Sandy Bartlett ZS2LN
- 7 Hettie Taylor, XYL of ZS2AAX
- 9 Pam ZU1PAM & Phil Hopper ZS2PP
- 14 Vicky & Allan Ansell

on the new call sign Kevern Layton,

ZR2KJL. Kevern awoke on his 12th birthday on 13 November to the dulcet tones of birthday greetings on two metres and was able for the first time to respond, having waited many months since passing the RAE to reach the legal age for a ZR licence. Great stuff, Kev!



on the move: Dick Schönborn ZS2RS is winging his way to the UK again in mid December for a few weeks. Hope you enjoy a white Christmas, Dick!

We hear that Shawn Corder ZR2SC is packing his bags and leaving for the green pastures of the UK in a couple of months' time. We don't know whether he will be flying there or absailing.

Bill Browne ZS2BY and Joan have bought a townhouse in Pretoria and will be spending half their year there and the other half in PE. (How about getting on Council?)

New Member: Gerald Taylor ZS2AAX of Grahamstown, who has applied for membership of PEARS. Gerald was a member during our Branch era.

Sick List: We learned belatedly that Bill Hodges ZS2ABZ had a hernia operation during November. Hope you are fully recovered by now, Bill. We missed your touch with the tea and munchies at the last meeting!



Your Society's Committee

Chairman: Repeaters, Packet	Chris Scarr ZS2AAW	38-1344
Vice Chairman: Social, Special Events	Dick Schonborn ZS2RS	38-5070
Secretary: Repeaters, Packet	Jacques van der Heide ZR2JH	73-3728
Treasurer: Assets Control	Clive Fife ZS2RT	32-3203
Awards, Refreshments, QSO collation	Bill Hodges ZS2ABZ	51-2580
QSO Editor	Garth Laaks ZS2HB	38-1101
e-mail the Editor at	glan@netstar.co.za	
Assisting QSO collation/distribution	Trevor Scarr ZS2AE	32-1746
Technical Classes, Social	Shawn Corder ZR2SC	360-7369
Librarian	Des Herselman ZR2DH	54-2911 (W)
		Cell 083 261 5402 (All Hrs)

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 (ZSONTP)	144,625
Packet Rose Switch ZSOGHT-3,046101 (144,675 in out) or (046101) (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

Sunday Bulletins

PEARS bulletins are transmitted on Sundays immediately after the SAREL English transmission, i.e. at about 08:45 on 7028 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' 7000 and 7040 kHz transeceive facilities are also remotely linked as needed. In addition, the SAREL'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 transeceive capability for interactive events.

Date	Prepare and Read on 2m Repeater link	DIARY DATES
20 Dec	ZR2JH	DECEMBER
27	ZS2RT	NO CLUB MEETING
3 Jan	ZS2ABZ	JANUARY
10	ZR2SC	7 Wrinkly Rave
17	ZS2HB	15 Club monthly meeting
24	ZS2AAW	16-17 PEARS VHF/UHF contest

* We Like Being Your Society! *