

August-September 2015



The VW Rally 2015 was a soggy event...

This Newsletter is published by the Port Elizabeth Amateur Radio Society
P.O. Box 10402, LINTON GRANGE, 6015

Editing by Christopher ZS2AAW

QSX-PE - Newsletter for the discerning Radio Ham

Download QSX-PE from www.zs2pe.co.za/Newsletter/Newsletter.htm
or www.commco.co.za/pears.htm

PEARS Monthly Meeting

Tuesday 15th of September, 7:30 pm

TBA (Listen to the Sunday bulletin)

at the Italian Sporting Club, 17 Harold Road, Charlo.

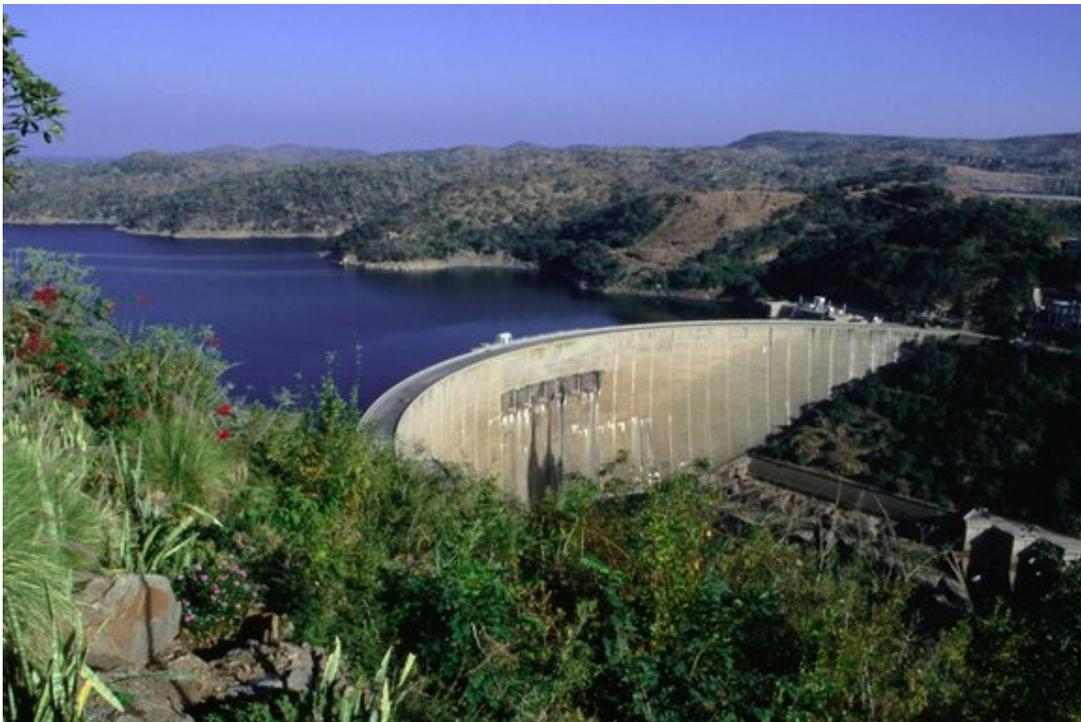
DIARY OF EVENTS

30 August	SARL HF CW Contest
	RAE REGISTRATION FOR OCTOBER
3 September	The RAE registration for the 15 October 2015 is now open. The fee is R475.00, students younger than 25 pay R375. The fee includes the ICASA administration fee and the cost of the first year license (or part thereof).
18 September	PEARS Lasagne evening
15 October	Radio Amateur Examination

Africa's creaking giant Kariba Dam threatens to unleash biblical deluge

RW Johnson, Cape Town

Because NOTHING has been maintained since Independence 34 years ago !



The Kariba dam provides much of southern Africa with power (Ariadne Van Zandbergen)

FEARS of a humanitarian disaster are growing as engineers warn that Africa's mighty Kariba dam, opened by the Queen Mother in 1960, has developed severe structural faults. A collapse would unleash 180bn tons of water from the largest man-made lake on the continent, sweeping thousands of hippos and crocodiles into an area of Zambia that is home to 3.5m people. The torrent could roar on into Mozambique and Malawi.

Much of southern Africa, which depends upon the dam's turbines for electricity, would be plunged into darkness. This month Felix Nkulukusa, permanent secretary at the Zambian finance ministry, told reporters that the wall of the dam had developed serious structural weaknesses. We are told by engineers that if nothing is done in the next three years the dam may be swept away, he said.

A Zimbabwean engineer at the dam, who did not wish to be named, told The Sunday Times last week that the vibrations are downright scary when the floodgates are opened to allow water to be discharged after heavy rains. You can hear and feel the dam wall vibrate, he said. The water cascades into a plunge pool beneath the 420ft-high dam. It is supposed to be 30ft deep but has eroded at points to more than 250ft, potentially undermining the dam wall. Adding to the problem is a risk of earthquakes. The dam is built at the southern end of the Rift Valley, a tectonically active area where there have been at least 20 quakes of a magnitude greater than 5.

Elizabeth Karonga of the Zambezi River Authority, which is jointly owned by Zambia and Zimbabwe, sought to allay fears but admitted that the situation at the Kariba dam wall is cause for grave concern. Chris Yaluma, the Zambian minister of mines, energy and water, managed to spread further disquiet when he said: There is no need to panic. The dam wall will not collapse overnight. A collapse of the Kariba dam could trigger further disasters. Once the tidal wave of water reached Mozambique it would overwhelm the mighty Cahora Bassa dam and release another 51bn tons of water, making the spillage four times bigger than the largest on record.

The river authority regards repairs to the plunge pool as urgent and it is sufficiently worried about a failure of the floodgate to suggest the construction of a new emergency gate. At least \$250m is needed for the repairs. But Robert Mugabe's regime in Zimbabwe has kicked out the International Monetary Fund, the World Bank and anyone else who might lend the money. The Zambians are more optimistic and say the World Bank, the European Union and the African Development Bank are all likely to help. Even so, such repair work will not start for many months.

People are worried, perhaps irrationally, said Richard Maasdorp, a Zimbabwean engineer. But they know the clock is ticking.

---oooOOOooo---

From the Workbench – Part 6

Allan, ZS2R

In the last part (part 5) I reported on the findings regarding the reverse isolation of different amplifier configurations. In that part I expressed the reverse attenuation as a fraction and a negative value in dB. I wrote for example: Reverse attenuation about 0,5 (-6dB). It would be better I think to talk of reverse attenuation as 2 (6dB) or reverse gain as 0.5 (-6dB). I notice that both terminologies are used by authors on the internet but I will use the latter from now on.

I experimented with the 2N3819 JFET in the common drain, common gate and common source configurations and found much the same as before.

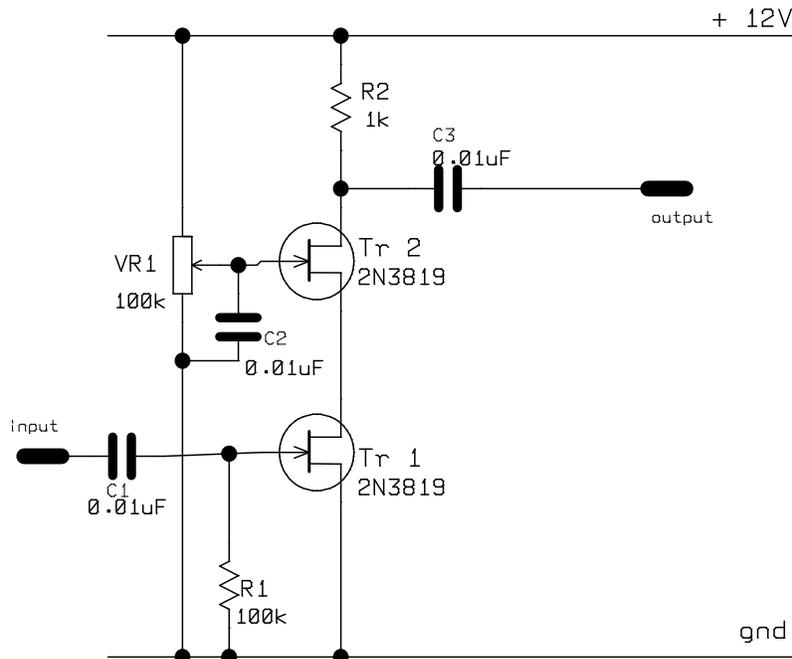
Common drain:- reverse gain 0.1 (-19dB)

Common gate :- reverse gain 0.03(-30dB)

Common souce:- reverse gain 0.2 (-14dB)

It should be noted that these results must be considered as a guide as each device and circuit will yield different values of gain and reverse gain.

Reading and experimenting has led me to the following configuration as the best simple amplifier with good reverse isolation and high input impedance.



Bias was set by adjusting VR1 so that there was about 3V across each of Tr1 &Tr2. This arrangement has a forward gain of 2 and a reverse gain of 0.008 (-42dB). Not designed for high gain, this example illustrates the high reverse isolation that can be achieved with this arrangement. The 2N3819 is a very old device and I am sure more modern devices would perform even better. Note that Tr1 is operating as a common source and Tr2 as a common gate amplifier. Tr2 providing most of the isolation. The high input impedance of

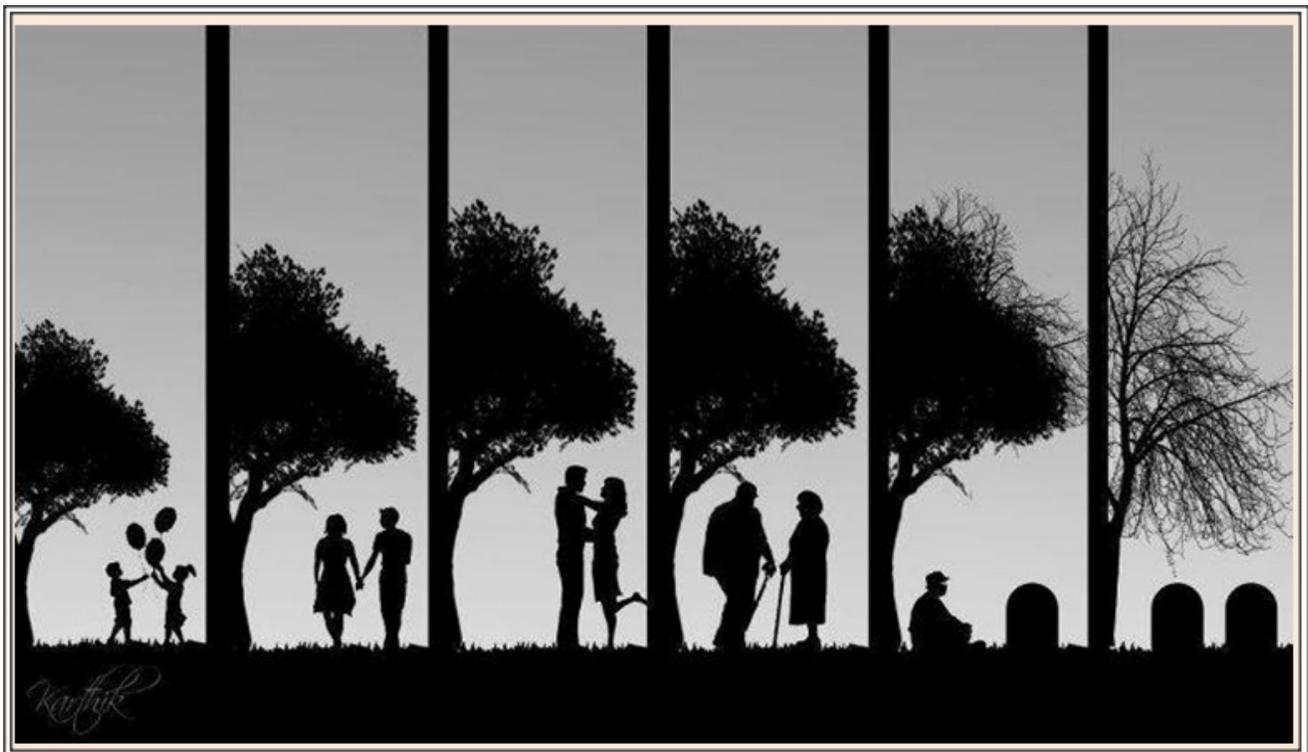
Tr1 is often a desirable feature of a buffer. This arrangement can also be used with bipolar transistors or mosfet or a combination of any two, due care being taken to get the biasing right. Dual gate mosfets are readily available , the two mosfets being interconnected inside the package.

In a recent project I was working on a driver for a high Q filter at 36 MHz and was troubled by all manner of arrangements going into oscillation. When I installed a BF960, dual gate mosfet, in an arrangement as above, the problem was solved. Isolating the input and output of an amplifier seemed not only an external affair. In these few experiments I have not attempted to measure (or discuss) the phase of the signal that travels in reverse through an amplifier, that's for another rainy day.

Signals creeping backwards through an amplifier are caused largely by inter-junction capacitance and in the case of the common collector amplifier, by a forward biased base-emitter junction which is virtually an open gate for signals. I have an old portable radio where most of the local oscillators signal is transmitted from the antenna. Not so good for QRM !

(End of Part 6)

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The circle of life

WISDOM

When I was 13, I hoped that one day I would have a girlfriend with big boobs.

When I was 16, I got a girlfriend with big boobs, but there was no passion, so I decided I needed a passionate girl with zest for life.

In college I dated a passionate girl, but she was too emotional. Everything was an emergency; she was a drama queen, cried all the time and threatened suicide. So I decided I needed a girl with stability

When I was 25, I found a very stable girl but she was boring. She was totally predictable and never got excited about anything. Life became so dull that I decided I needed a girl with some excitement.

When I was 28, I found an exciting girl, but I couldn't keep up with her. She rushed from one thing to another, never settling on anything. She did mad impetuous things and made me miserable as often as happy. She was great fun initially and very energetic, but directionless. So I decided to find a girl with some real ambition.

When I turned 30, I found a smart ambitious girl with her feet planted firmly on the ground, so I married her. She was so ambitious that she divorced me and took everything I owned.

I am older and wiser now, and I am looking for a girl with big boobs.



SOLAR PANELS

Last year I installed those solar panels in my house for the geyser, that energy-efficient kind.

Today, I got a call from the contractor who installed them. He complained that the work had been completed a year ago and I still hadn't paid for them.

Hellooo just because I'm a blonde doesn't mean that I am automatically stupid. So, I told him just what his fast-talking sales guy told me last year that these panels would pay for themselves in a year.

Hellooo? It's been a year, so they're paid for , I told him.

There was only silence at the other end of the line, so I finally hung up. He never called back. I bet he felt like an idiot.

NB - PEARS Social - NB



Diarise **Friday the 18th September** – We will have a Lasagne Evening at the Italian Club, with a bottle of wine or two per table, the pub will be open, and some entertainment will be provided. For R50 per head, you will be provided with Lasagne, a bread roll and small salad

Please RSVP to Clive, ZS2RT via email, SMS or phone before Wednesday the 16th September (or the sooner the better!)



(Only those that have RSVP'ed will have food ordered and therefore will have supper available).

Tour de Longmore – A VW Rally story

ZS2RL

Saturday morning, cold and wet, Longmore here we come! Mel, Dave ZS2DH and I set off with great optimism and enthusiasm for the task ahead. Lots of grub in the back, tracks and waypoints all preloaded in the GPS. Nothing could go wrong go wrong go wrong

We traveled in convoy with Donovan ZS2DL, and our ways parted at PPC where he was to do duty at 10 start. We continued into Longmore in search of our station at Mid A. Much rain, water and mud, but that didn't dampen our enthusiasm. Finally the GPS said that we had arrived; we were well ahead of time, so it was no surprise to find that we were the only souls there. After some time we saw zero-zero come by, and soon thereafter zero-zero came up on frequency to tell us that we were in the wrong position. Oh dear, the GPS had lied to us! We were to continue for a few kms and we would see the place: ambulance and big white marker boards clearly visible – we couldn't miss it (heard that somewhere before!).

Well, we upped the sea anchor and went in search of the place, eagerly scanning the road ahead for signs of an ambulance and big white marker boards. Seeing nothing after a few kms, we did a few more kms. Nada. Contacted zero-zero, who then gave us the coordinates of the midpoint – funny, they were exactly the same as those of the place where we had been in the first instance. Huh?? About this time we saw, coming gingerly towards us, an elderly Ford Escort containing three young folk. We promptly announced to the world that there were some stupid spectators on the route that were traveling against the flow of traffic. (In hindsight, these were the rally marshals en route to the midpoint, to set it up. The big white marker boards that we “couldn't miss” were in fact still safely tucked away in the boot of the Escort).

After travelling 10 kms it was obvious that something was amiss. We stopped, and called for further instructions. Turn around, go back was the reply, we can't miss it. Oh yeah . . . Next challenge: how to execute a u-turn under those conditions.

Then Johannes ZS2JO, who was traveling in car zero, called us to ask whether we had a tow rope – the ambulance was in position but seriously stuck in the mud. That was reassuring news, in that there would at least be some form of permanent marker at the 'correct' location (the ambulance was going nowhere until we got there with the towrope, and you've gotta be blind not to notice an ambulance stuck on the side of the road).

Zero pulled the ambulance clear, and went on his merry way. It soon became obvious to us that that position was not suitable for a mid-point. The only safe off-street parking for us was down a muddy and slippery slope onto a minor forestry track, and the ambulance had already convincingly demonstrated the foolishness of that manoeuvre. We requested permission to relocate to a more suitable place, and permission was granted. Next

problem: earlier on, the young marshals had reversed their Escort down the slope onto the forestry track. The plucky little Escort had to make three valiant attempts at charging the slope before it managed to claw its way back up onto the main drag.

Soon found ourselves a suitable spot to set up camp, and all ended well.

Back home, that glass of OBS sure went down well!

PS:

For those with internet facilities, try this link for some in-car camera action from Mark Cronje's vehicle:

<https://www.facebook.com/markcronje24/videos/vb.268217199976646/549762018488828/?type=2&theater>

---oooOOOooo---

“Letters to the Editor”

From: "Condon, Claren: Corporate Real Estate Solutions" <clarenc@absa.co.za>

Date: 16 July 2015 at 13:48:36 SAST

To: "Johannes@s4.co.za" <Johannes@s4.co.za>

Cc: "Nick.peham@gmail.com" <Nick.peham@gmail.com>

Subject: PEARS Web Site

Hi Guys,

I came across your March 2014 Newsletter and subsequent PEARS Web Site, while trying to obtain info on CB Radio's from between 1975 to 1981, in Port Elizabeth.

I must say, I really ended up spending hours reading your Newsletters and various articles, which are very informative and fun.

Loved the jokes, especially the How to get to Heaven from Ireland - "YUV GOTTA BE FOOKN' DEAD."

In the period mentioned I was at Newton Park Tech and lived in Young Park. There was major competition around who had the longest and biggest aerial. I'm not going to brag about that but will admit I upgraded from a CB radio mounted on the handle bars of a bicycle, to a 12 volt battery strapped to a carrier on the back to a Yamaha MR 50cc and moved around fast enough to "any lady for a chat". Riding around the burbs looking for a strong signal to indicate where the ladies lived, checking out for aerials mounted on house roofs. Needless to say, most of the pretty voices of the "ladies" ended up being some really

old woman, trying to get a young okie to come have a cold drink and to talk about anything which comes up first.

But, I guess those days, any girl by more than 3 years my age was old.

We had a small club in Algoa Park, where we would meet at different folks homes and then go riding in the "parents' cars' for outings into places like Addo and Seaview White Lion Farm. Unfortunately, in all instances the parents were with us in their cars. We would have spotters, looking for specific animals and then we would lead "tourists" to the find. It was fun and exciting. Same as we assisted at times with Cycling by riding ahead of the packs and spotting for dangerous situations and then shouted back and our boys and girls would give info to the riders on route.

There was a church in Young Park, who asked us to "shut-up" on Sunday Mornings, as during a Church Service, some of us would come bursting through the PA System during the Service. There were a lot of "unhappy clappers" at Church, when we got onto the CB's. But good parenting and even more obedient children that we were, we gave due respect to any Church Service, giving them the right of way.

Memory of "skip jumps" especially at approximately 15:100, where we would catch up with Farm Schools in Rhodesia. That used to sort out, who had the best antenna's. Tricks were to fill up the poles with water, lead, copper, crystals and tin foil or what-ever worked best.

The odd occasion I would catch up with a mate in Australia and Texas, USA. OK, it was a lie as it was actually a school mate of mine up In Newton Park, putting on a accent and making up stories. We would love the way everyone would want to break-in to have a chat to him and he would ignore them and only talk to me as if he can only pick up my signal.

We had some great fun, until a got a girl-friend while in Matrix and forgot about all my CB Friends like overnight.

Needless to say, when going off to the Army, any chance we could find to turn knobs on our bush packs, we would tune into radio stations, CB radios and ou's like you and had some fun from SWA Border.

Anyways, must break comms now and will catch up with you guys one day when I come down to PE from Johannesburg.

You guys are definitely doing a great job and it is evident you serve a valuable service to the communities in and around PE.

Please keep up the great work you are doing with Lake Farm Centre for Adult Care and also please fight the Lady Slipper rent and advertising the municipality are trying to screw you with. If you're looking at drawing up a petition, count on my vote against any payments due to the service offering you provide to the community by having your repeater at lady Slipper.

Good Luck

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Swops (email swopshop@peham.co.za)

WHAT....	WHO...
2m Base station antennas – end fed half wave	Ken ZS2OC – 041 360 1722

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CONGRATULATIONS

BIRTHDAYS – August

- 03 Rob Mac Geoghegan ZS2ROB
- 04 Brenda Whitehead, XYL of Allan ZS2R
- 18 Al Akers ZS2U
- 18 Maggie Moore, XYL of Ian ZS2IJ
- 20 Ronel Kleinhans, XYL of Errol ZS2EK
- 24 Daschell Geldenhuys, XYL of Johannes ZS2JO

BIRTHDAYS – September

- 02 Johannes Geldenhuys ZS2JO
- 02 Mel Gwilt, XYL of Bevan, ZS2RL
- 07 Merle Thomas ZR2MP, XYL of Neil ZR2NT
- 08 Phil Hopper ZS2PP
- 09 Andrew Bouwer ZS2AFB
- 10 Andre van Deventer ZS2BK
- 11 Barry Jackson ZS2H
- 11 Jane Fife, XYL of Clive ZS2RT
- 12 Pam Hopper ZU1PAM, XYL of Phil ZS2PP
- 12 Jo Akers ZS2W, XYL of Al ZS2U
- 20 Ellie Goosens, XYL of Rudi ZR2RCG
- 24 Michael Opperman ZS2MD
- 27 Ewald Bouwer ZS2EHB
- 28 Glen Cummings ZS2GV

BIRTHDAYS – October

- 01 Eric Hosten ZS2ECH
- 04 Donovan van Loggerenberg ZS2DL
- 06 Norma Flanagan, XYL of Terry ZS2ABB
- 08 Vanessa Scarr ZS2VS, XYL of Chris ZS2AAW
- 12 Neil Thomas ZR2NT
- 13 Llise Dodd ZS2LLD
- 24 Cathy Gerstle, XYL of Wolf ZS2WG
- 26 Stoffel Carr ZS2C

ANNIVERSARIES – August

- 24 Dave & Beverley Higgs ZS2DH
- 26 Terry & Norma Flanagan ZS2ABB

ANNIVERSARIES – September

- 02 Allan & Joan Bowles ZS2BO & ZR2ABA
- 06 Les & Lyn Barker ZS2VA
- 14 Paul & Daphne Galpin ZS2PG

ANNIVERSARIES – October

- 01 Tony & Deidre Allen ZR2TX
- 03 Mike & Susanna Bosch ZS2FM
- 08 Michael & Christel Opperman ZS2MD
- 12 Donovan & Rosalee van Loggerenberg ZS2DL & ZS2DN
- 24 Al & Jo Akers ZS2U & ZS2W

If you are a member and your birthday or anniversary details are omitted or incorrect, please notify Clive ZS2RT (or any committee member) to update our records.

Minutes of the July Monthly Meeting

Held at the Italian Club on the 14th of July 2015

Welcome: Chairman Chris ZS2AAW welcomed all present, with a special welcome to some “Old Faces” GRL, JH, CV, Jimmy, Johan and Freddie.

Attendance and apologies:

As per the attendance register. Apologies from Bill ZS2ABZ.

Acceptance of the Minutes of the Previous Meeting:

Proposed: ZS2DL Seconded: ZS2RL.

Matters Arising:

None

Correspondence:

The chairman Chris, read the letter that PEARS was sending in reply to the request for renewal of the lease for the 145-700 repeater on Ladies Slipper and the request for a fee of R5,016-00 to cover advertising for possible objections. Tony ZR2TX had compiled the letter and everyone agreed it was well constructed; he was thanked by the chairman Chris.

The chairman also thanked Johan ZS2JO for sending off the documentation for the club to be affiliated to the S.A.R.L. and to Clive ZS2RT for the payment.

Finance: The treasurer Clive ZS2RT reported that everything was in order with the society's finances and that to date, there were 60 paid up members.

General:

1. The chairman thanked Bev and Nick for doing the Sunday bulletins and asked for more volunteers to help read future Sunday bulletins; the aim was for enough members to volunteer so that each reader would only have to read one Sunday in each two month period.
2. A possible "Field Day" in November was discussed.
3. A possible joint venture with "The Boarder Radio Club" at The Fish River for the Lighthouse Weekend was also discussed.
4. It was noted that due to ill health Bill ZS2ABZ would miss the V W Rally for the first time in about 23 years.
5. Freddie ZR2FM made a request for anyone with surplus W.W. 2 memorabilia, to please contact him.
6. John ZS2GB inquired about the remote radio on "Ladies Slipper", he was informed that the frequency for the remote radio was 438-800.

Guest Speaker

Al ZS2U gave a short talk on Half Wave antennas

Tea

A short break for tea and biscuits was taken at 20-15pm.

V W Rally

After tea, Tony ZR2TX briefed those involved with the rally and rally clothing was distributed.

Meeting closed

The meeting closed at 20-45pm.

Chairman: C Scarr

Secretary: J Ashworth

Sunday Bulletins

PEARS provides a local reading of the SARL national bulletins in Afrikaans at 08h15 and English at 08h30. The club bulletins are transmitted immediately after the SARL English bulletin, i.e. at about 08:45 on 7098 kHz as well as the 2m linked network that provides coverage from Butterworth to George and up to the Free State and their environs.

A recorded rebroadcast of the society bulletin takes place on the Eastern Cape Linked Repeater Network every Monday night at 20h00, courtesy of Ewalt, ZS2EHB.

Bulletin Roster

www.zs2pe.co.za/bulletins.htm

2 August	Clive	ZS2RT
9 August	[Chris]	[ZS2AAW]
16 August	John	ZS2GB
23 August	[Clive]	[ZS2RT]
30 August	[Nick]	[ZS2NT]
6 September	Chris	ZS2AAW
13 September	Tony	ZR2TX
20 September	Johannes	ZS2JO
27 September	Clive	ZS2RT
4 October	John	ZS2GB
11 October	Glen	ZS2GV

The bulletin readers are always looking for something to announce. If you have something to contribute, please forward it to the next reader.



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Your Society's Committee for 2015-2016

Chairman, QSX, Wifi, Repeaters	Chris Scarr ZS2AAW	082 925 6367	christopher[at]peham.co.za
Vice Chairman, Events & Rally organising	Tony Allen ZR2TX	082 956 2920	tony.zr2tx[at]gmail.com
Secretary	John Ashworth ZS2GB	082 490 2500	Johna[at]littleslipper.co.za
Treasurer	Clive Fife ZS2RT	041 367 3203	clive[at]peham.co.za
Technical/repeaters	Glen Cummings ZS2GV	082 411 2743	glenvanessa[at]gmail.com
Public Relations	Johannes Geldenhuis ZS2JO	082 320 3032	johannes[at]s4.co.za

CO-OPTED POSTS

RAE Examination Admin.	Donovan ZS2DL	082 852 4885	zs2dl[at]hamradio.co.za
HF Assessors	Rory ZS2BL	072 026 8909	rory[at]commco.co.za
	Chris ZS2AAW	082 925 6367	christopher[at]peham.co.za
	Bill ZS2ABZ	041 581 2580	zs2abz[at]isat.co.za
Hamnet scoring	Al ZS2U	041 360 2983	al[at]peham.co.za
Contest Committee	Theunis ZS2EC,	082 766 8830	contest[at]peham.co.za
	Al ZS2U	041 360 2983	
PEARS VHF/UHF Contest	Mike ZS2FM	084 612 9600	mikebosch[at]gmail.com
Meetings catering	Bill Hodges ZS2ABZ	041 581 2580	zs2abz[at]isat.co.za
QSX Editor	<i>Vacant</i>	-	-

Replace [at] with @ when you want to send an email (this is done to try to prevent spamming).

PEARS' VHF/UHF, Packet & Other Services

Local Repeaters: These repeaters form a separate sub-net in the PE - Uitenhage - Despatch area.

Town VHF 145,050/650	Town UHF 431,050/438,650	Uitenhage 145,075/675	Longmore 145,025/625	IRLP available on this subnet
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Cape Linked System Repeaters:

These form the PEARS long-range 2-metre repeater system, in conjunction with the Border, Southern Cape and WCRWG systems. See www.zs2pe.co.za/Repeaters/repeaters.htm for more details.

Lady's Slipper 145,100/700	Grahamstown 145,150/750	Cradock 145,050/650	Noupoort (link only) 438,750 / 438,675
Colesberg 431,075/438,675	Kareedouw 145,125/725	Plett 145,175/775	Brenton 145,075/675

Packet network:

ZS0NTP-2 Packet Node Lady's Slipper 144,800 1200bd 439,850 9600bd 434,800 1200bd APRS	ZS0NTP BBS Lady's Slipper On all node frequencies	ZS0GHT-2 Packet Node Grahamstown 144,800 1200bd 434,800 1200bd 439,850 9600bd (to LS)	ZS0CDK-2 Digi Cradock 144,800 1200bd
	ZS0KDJ APRS Digi Mount Road 434,800 1200bd	ZS0KDB APRS Digi Longmore 434,800 1200bd	ZS2ABZ-4 WMR918 WX Station 144,625 1200bd

VHF Beacon: 50,007 MHz FSK – ZS2X, 25 Watts into 2 element Yagi beaming north.

Banking details (for subs & donations): NEDBANK SAVINGS ACCOUNT No. 221 252 7594, Bank code 121217, A/C name: Port Elizabeth Amateur Radio Society. **Please use call signs as a reference.**

Disclaimer.

Note: The Editor, nor any PEARS club member, shall not be held liable for errors and/or omissions in any article and/or drawing contained in this newsletter. Furthermore, any view expressed is not necessarily that of the Editor, any committee member or other members of the Club. The material contained in this newsletter is not meant to defame, purge, humiliate and/or hurt someone's person or feelings.

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