



QSL PE



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

WEBSITE: www.qsl.net/zs2pe

**PO BOX 10402
LINTON GRANGE
6015**

JUNE 2005

PEARS' MONTHLY MEETING

The monthly general meeting of the PORT ELIZABETH AMATEUR RADIO SOCIETY will be held on **Thursday, 23 June 2005** at the St Hugh's Church Hall, Newton Park, starting at 20:00 (8 pm).

Please note the change of evening from the third to the fourth Thursday!

Members of the Mountain Club of South Africa will be giving us a talk about their activities, with the accent on the search and rescue aspect, and a slide show of the recent efforts to re-activate the Cockscomb repeater.

Bill ZS2ABZ will provide us with our usual tea, coffee and biscuits.

Wrinkly Ravers

At the June Rave we had a good 12 members present plus two small fry, all having their regular monthly meals.

Julie and Trevor sent their apologies, having to look after an ill young family member, but on the other hand we enjoyed Peggy and Viv's company, together with their friend Colin Smith, who sat next to Colin ZS2AO. There must be many others floating around somewhere, with Mel and Beavan holidaying (again!) in, I believe, Kwa-Zulu Natal.

The next Wrinkly Rave will take place on 7 July 2005. The place: Barney's, in the shopping complex in Circular Drive.

VOLKSWAGEN RALLY 8, 9 JULY 2005

We need volunteers for providing communications for the Rally, which will take place on Friday and Saturday 8 and 9 July 2005.

Please contact **AI ZS2U** as soon as possible if you are prepared to assist. Phone 360 2983 or call on the Lady's Slipper or Town repeaters.

Information required is whether you can help on Friday and/or Saturday and your order of preference to man Control, Results, Mobile vehicle or stages – also whether the stages should be in Port Elizabeth, out of town or in the forest.

We will accommodate your preferences as far as possible.

FOR \$ALE ★ WANTED ★ SWOP

FOR SALE or FOR WHAT HAVE YOU

* Two Decca Nav 6-foot rack and panel, 1 kW, 70 kHz (low frequency) transmitters, solid state, each having eight 100 W audio modules, and each of which makes a very good hi-fi amp! Driver stages and cooling fans on the lower panels. Never used as they were spares. Tel. John ZS2J at 046 625 0163 or 082 990 5793.



Firstly, I would like to personally thank the past committee for all their efforts during their term of office and also all the other members who did their bit to ensure the smooth running of the Club.

Secondly, since taking over office, I have been inundated with ideas, requests, etc. from all sides, and if this is an indication of the year ahead, we are going to have an active, enjoyable one.

I shall do what I can towards this end and I will appreciate the co-operation of all the members, even if it is only to participate in all the activities.

Please read QSX carefully as there are a number of changes.

Radio Amateur Examination

Not only did candidates have to write the RAE, but also had to pass a test on the operation of a transceiver. Four candidates wrote the RAE on Thursday, 19 May, two were tested on Sunday 22 May and the other two on Tuesday 24 May. I am glad to report that they all passed.

They are:

*STEFAN SMEDA ZR2VV
ANDRO KOUTSOUDIS ZR2DEK
CHRISTO BECKER ZR2CB
BARTO DE KONING ZR2BDK.*

The first two are members of the Mountain Club of SA, which means that we now have 19 members of the Mountain Club who are radio amateurs.

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Al, ZS2U

Office Bearers

As from 1st July the new office bearers of ECARES will be:

DIRECTOR: Al Akers ZS2U

DEPUTY DIRECTOR: Ken Victor ZS2OC

Assistant directors:

Port Elizabeth: Stoffel Carr ZS2C

Port Elizabeth: Des Pettit ZS2ABU

East London: Chris Barnes ZS2S

Grahamstown: André Mulder ZS2AJ.

Emergency in PE

Over the weekend of 28 and 29 May we had a lot of rain, and with

thunderstorms a large part of the time.

Power lines were struck in three different places by lightning, which resulted in several suburbs and rural areas being without power for several hours.

A house in van der Stel had its front porch smashed by a lightning strike. Kabega Park also had a problem with their water supply.

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Al Akers, ZS2U

Provincial Director:

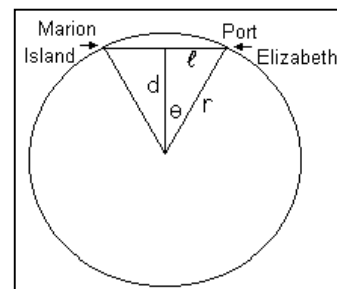
Hamnet/ECARES

Answer to last month's Boat Puzzle...

The circumference of the Earth is roughly 40 000 kilometres and going from Port Elizabeth right round the Earth would be 360 degrees. Earth radius r would be $40\,000/2\pi$ or 6366 kilometres. From Port Elizabeth to Marion Island is 1760 kilometres, so the angle round the Earth thus travelled would be $(1760/40000) \times 360$, or 15,354 degrees. Angle θ would be half of this, or 7,677 degrees.

Distance l may be obtained from $l = r \sin \theta = 6366 \times \sin 7,677$ or 850,4 kilometres. Distance from PE to Marion Island direct would be twice this or 1701 kilometres, shortening the trip by 59 kilometres.

Length of line d can be obtained from $d = r \times \cos \theta = 6366 \times \cos 7,677$ or 6309 kilometres. From the top of line d to the Earth surface would be Earth circumference minus line length d , or $6366 - 6309$ or 57 kilometres. At the halfway mark the boat would be 57 kilometres below the surface of the sea.



And, if that bothered you, here's the Train answer...

From the time the front of the train has reached the start of the tunnel to when the back of the train reaches the end of the tunnel, the train would have travelled 2 kilometres.

The train travelling at 60 kilometres per hour would therefore take 2 minutes to pass through the tunnel. 🚂

Results of PEARS VHF/UHF CONTEST, January 2005

50 MHz	70 MHz	144 MHz	432 MHz
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SINGLE OPERATOR ANALOGUE

ZS1NAZ	47320			ZS1GZ	8946	ZS1NAZ	1419
ZS1GZ	631			ZR1DJP	3964	ZS1GZ	38
				ZS1NAZ	3579		
ZS2U	2025	ZR2DX	60	ZS2ACP	14940	ZS2ACP	614
ZR2DX	1974	ZS2U	58	ZS2U	13880	ZR2DX	48
ZS2ACP	1152	ZR2GLP	54	ZR2VDL	13360	ZS2ABZ	5
ZR2GLP	106	ZS2ACP	34	ZS2BO	11804		
ZS2ABU	68	ZS2ABU	31	ZR2VAN	8788		
ZS2ABZ	43	ZS2ABZ	12	ZS2ABZ	8388		
				ZR2DX	6608		
				ZS2N	2877		
				ZR2EC	2200		
				ZR2GLP	1702		
				ZS2F	1700		
				ZS2EJ	293		
				ZS2ABU	280		
				ZR2RT	65		
ZS4SS	5862			ZS4SS	1934	ZS4SS	123
ZS6TWB	13775	ZS6TWB	23	ZS6WB	8850	ZS6WB	1299
ZS6WB	9600	ZS6WAB	14	ZS6TWB	5241		
ZS6WAB	1803			ZS6WAB	4950		

MULTI – OPERATOR ANALOGUE

ZS1MHZ	2116			ZS1MHZ	19760	ZS1MHZ	7390
ZS2CE	2826			ZS2CE	51015	ZS2CE	2008

LONGEST DISTANCES ANALOGUE IN Km.

ZS1NAZ	1535	ZR2DX	11	ZS6WB	428	ZS2ACP	253
ZS6TWB	"	ZR2GLP	"	ZS4PV	"	ZS2CE	"

LONGEST DISTANCES DIGITAL IN Km.

ZS1NAZ	1535			ZS1NAZ	1535	ZS6WB	240
ZS6WAB	"			ZS6WAB	"	ZS6NK	"

SINGLE OPERATOR DIGITAL 50-432 MHz

OVERALL WINNER	ZS6WB	182820 Points.
RUNNER UP	ZS4SS	115294
	ZS1NAZ	90308
	ZS6WAB	33941
	ZR2DX	24856
	ZS6HS	5463

STOP PRESS!!

We have just heard that the SARL has received word of its appointment as the National Body approved by the Minister as set out in the new Regulations. *The SARL can now begin to assess applicants under subsections (3), (4) and (5) of the Regulations!*

Bushman's Radio Op helps with Deep-Sea Rescue

from *Talk of the Town*, Port Alfred

On a routine transmission of weather to yachts at sea by the Durban Amateur Radio Maritime Mobile Net on April 28, bushman's Graham Griggs picked up a distress call from the South African yacht, Dalkiri, with Jess Hawes and Heather on board.

Both old radio ham friends of his, they had endured some very heavy weather on the previous day, had broken the boom of their yacht and could not use their main sail. Their engine would also not start and they were drifting.

"They were just off the coast of Brazil at a position of 27.45 South and 48.13 West. They requested urgent assistance and I informed Jess that I would contact the MRCC and pass on the request. Jess said that they had been trying to contact the Brazilian maritime authorities on various maritime frequencies for hours without any success and was very pleased to have made contact with me," said Graham, who arranged to call them again in two hours' time.

After contacting the Marine Rescue Control Centre in Cape Town, Graham gave them a detailed description of the yacht call sign and its position. The MRCC told him that they would contact MRCC Brazil, who would then arrange for the Brazilian Navy to send a rescue ship to go to the Hawes' assistance.

"I called Jess again and informed them that MRCC Brazil was informed and that help would soon be on the way. The MRCC contacted me and told me that a Brazilian navy ship was on its way to assist yacht Dalkiri," said Graham.

He called Jess back and informed them the good news, but by this time the navy ship had already contacted them and told them that they were on their way.

At about 16:30 the navy tug boat started towing them back to land. The couple arrived at the Jurere Florianopolis Yacht Club at 20:30, all safe and sound.

The Durban Amateur Radio Maritime Mobile Net was started by Alistair Campbell some 27 years ago and he is ably assisted by his wife, Davina, and several other coastal

radio ham operators. Alistair is based at Umzumbi on the lower South Coast of KwaZulu-Natal.

Due to ill health, however, Alistair is unable to run the net at present and Graham has taken over as net controller from March 3 until further notice. Graham is based at Bushman's River Mouth.



The Durban Amateur Radio Maritime Mobile Net operates twice daily, seven days a week and provides weather reports from around the coast and the deep-sea areas. It also maintains contact with yachts off the coast of South Africa and deep-sea areas from Brazil and Argentina to the West and Australia to the East, and up into the Mozambique Channel and Madagascar areas.

There are two regular schedule times as follows: • 06:30 UTC: Starts on 14,316 MHz for 5-10 minutes and then moves to 7,045 MHz. • 11:30 UTC: Starts on 14,316 MHz for approximately 30 minutes and then 7,045 MHz.

Graham said although people sometimes complain about the highmasts on the roofs of houses occupied by Net operators, it is important to remember that these operators provide a very necessary service to those out at sea, as was the case with the Hawes couple. 📻

Cockscomb Repeater in Action Again

Chris Scarr, ZS2AAW

The PE Amateur Radio Society's 145.600MHz Cockscomb repeater, located on Tierhoekberg in the Steytlerville district, has been out of action for some years. Originally built and erected by ZS2AE, ZS2RS and others in 1985, the site was last active in the mid 1990's for the 1994 election.

Transmitter failure took it off the air in the late 1990's, and lack of 4x4 transport made it difficult to reach.

The equipment was retrieved by OM Alan ZS2R and Neil, ZR2NT late in 2003. With the recent licensing of many of the mountain club and 4x4 club members as radio amateurs, an interest was expressed in assisting with the re-instatement of this repeater, since the coverage offered could be of major benefit in mountain club exercises and rescue events in and around the Cockscomb mountain range.

Rob, ZR2ROB arranged a helicopter trip for a 2 man team to be lifted atop the mountain with all necessary gear to re-instate the repeater during a planned joint rescue exercise on the weekend of 21st May 2005. Thanks to the previous equipment retrieval on foot by ZS2R and ZR2NT, the repeater equipment had been repaired by Alan ZS2R, and re-aligned by Chris ZS2AAW, with certain modifications to bring about standard, known audio levels in the transmitter and receiver.

These level "standards" will allow for easy swapping of spare units in future without the concern of varying audio levels between spares, and also the development of a UHF link interface to couple the repeater into either of the two linked systems in and around PE, for special events. All equipment was checked and given a clean bill of health.

A new sealed lead acid battery was purchased to ensure that sufficient power would be stored for the repeater to survive a designed four to five days of rainy weather. Spare antennae, brackets, stay wires, tools, coax and test equipment was loaded and ready to roll.

All preparations were made, and a 3 man team comprising ZS2R, ZS2AE and ZS2AAW chanced their luck with available

space in the chopper on the Saturday morning.

We met at the Landowner's farm at 08h00, and the chopper arrived sometime after 09h00. Wind had picked up from the North West early in the day, and the pilots confirmed this on their arrival. After some basic procedural training on loading and unloading had been delivered to the mountain rescue teams, the repeater team and all their equipment was loaded into the chopper and off we went.

Ten minutes later we were circling Tierhoekberg looking for a suitable landing spot on the Northern slopes. Rudi ZR2RCG and XYL Ellie had chosen to camp out on the adjoining Tygerhoek farm, near the Eskom site, and hike up the mountain to meet us. They were already there and formed a welcoming party.

Some hair raising downdraughts on the Southern slopes of the mountain ensured we got our value out of the chopper ride, whilst Rudi took plenty of photos. The flight engineer directed the pilots to a landing area, and with engines still running, began unpacking the equipment first. Unfortunately a sudden strong gust of wind necessitated a hasty take-off to prevent damage to the chopper by being swung into the mountain.

At the time of take-off, all the equipment had been unloaded and the flight engineer was outside the chopper standing on the ground. As a result, he sustained minor injuries and bruising when suddenly yanked off his feet (see pic).

The mountain was vacated and a calm spot further North was used to make a temporary landing to allow the flight engineer to climb aboard again. Due to the pain he was in, the trip was abandoned, and we returned to the assembly point at the farm to regroup and administer first aid.

Now we had a problem – all the repeater equipment was on top of the mountain, and we were down below. No comms could be established with the hiking party due to them not being on the air – they had no hand-held radio available. Rudi was surprised to see the delivery of the equipment, and sudden

departure of the chopper with no technical team to be seen anywhere! Fortunately he used common sense and later inspected the equipment, to find a hand held on 145.500MHz simplex, and when he called, a relieved ZS2AAW quickly answered him and requested temporary storage measures for the equipment.

Rudi obliged, and the equipment was securely stowed in a water tight survival bag, and packed under rocks on top of the mountain. A plan was then set in motion to climb the mountain on foot as soon as possible to complete the work.

A larger team was assembled a week later on the 28th May, to carry out the hike up the mountain to re-instate the repeater and bring down all the tools and equipment already deposited atop Tierhoekberg. The team was ZS2R and two labourers, ZR2RCG and XYL, ZR2ECH, ZS2AAW and ZS2AE.

Once again we assembled, but this time at the foot of Tierhoekberg, at 08h00. The mountain was under cloud, and remained so all day. Rain started falling in PE and later Uitenhage, but fortunately never reached the repeater site.

The first part of the trip is a ¾ hour 4x4 track up as far as one can get. Then the 1½ hour walk up the mountainside to the top, most of which was in the mist.

The team summited at about 10h30, and 12h30 were on their way back down again. Temperature was rather low, and conditions were very wet thanks to condensation of the mist. The original plan was to lower the pole to change the stay wires, but because of the uncertain weather, and lack of visibility to see what the approaching weather was doing, the lowering of the pole was called off.

Corrosion products within the box from the "wet" NiCad batteries were cleaned up, the TX antenna was changed because of water ingress causing problems for many years previously, and a UHF link antenna and feeder was added for the future link equipment. A liberal coating of Tectyl was applied to protect the aluminium box from further corrosion. The radio and control equipment was fitted and

the new battery connected up.

Success – the '600 repeater came alive again, to good reports from PE and Jeffreys Bay. Audio quality has been much improved thanks to the changes made to the interfacing levels. A meagre 5W TX power does very well, and also ensures minimum current drawn from the battery supply.

An RX crystal bandpass filter improves selectivity and reduces desense. A home-brew controller raises a beep alarm on the squelch tail when battery volts fall below 11.5V, and locks out the transmitter if the battery volts fall below 11.0V. This lock-out feature resets only when battery volts rise above 12V again. If these beeps are heard on the squelch tail, please take note of when, and what the weather conditions had been for the previous few days, and let Chris ZS2AAW know for interest's sake.

Developments will proceed in the interim for the UHF link facility, as well as a possible APRS digipeater co-located on the site to aid search and rescue activities. When these items are ready for deployment, we are sure to call on another eager team to take on the mountain again, hopefully in slightly drier and clearer conditions. Make sure you don't miss out on the fun!

Many thanks to the energetic team and the mountain club for the initial arrangements, and to the caterer and car guard for the ground support.

And may the various clubs and activities make good use of the 145.600 Cockscomb repeater once more. ☺



ACTIVITY ON 70 MHz

There is an upsurge of activity on the 70 MHz band. This is at least partly due to Ken ZS2OC making some AS1000 sets available.

These sets have twelve channels programmed as follows:

01	70,000 MHz	07	70,150 MHz
02	70,025 MHz	08	70,175 MHz
03	70,050 MHz	09	70,200 MHz
04	70,075 MHz	10	70,225 MHz
05	70,100 MHz	11	70,250 MHz
06	70,125 MHz	12	70,275 MHz.

Channel 09 (70,200 MHz) is used for monitoring.

Please note that these sets are not compatible with the A44 or PRC77 sets.

Stations currently active are:

ZS2ACT, ZR2DX, ZS2OC, ZS2ABZ, ZS2J, ZS2J, ZS2DK and ZR2BA.

MINUTES OF THE MONTHLY MEETING OF THE PORT ELIZABETH AMATEUR RADIO SOCIETY

held at the St Hughs Church Hall, Newton Park, Port Elizabeth on 21 April 2005

Welcome:

Rory ZS2BL welcomed all who had made the effort to attend. Special mention was made of Derek ZS5Y (visiting SARL Councillor) and Donovan ZS2DL.

Present and Apologies :

As noted in the attendance register.

Acceptance of Previous Meetings Minutes :

Proposed : ZR2NT,
Seconded ZR2J.

Matters Arising:

We need new committee members and a new Chairman.
The AGM takes place on Saturday 21 May, starting at 3.00pm. Members to start arriving from 2.00pm, at which time a fleamarket will be held.

Correspondence:

Received: Newsletters and a contest log.
Chris ZS2AAW advised that

he had received a fax from ICASA stating that they would be doing an inspection at Governorskop on Friday 22 April.

Finance:

The Treasurer presented a report on the finances of the Society. Mention was made of the R1000 donation to the club from the estate of the late Raphy Schauder ZS2SP.

Social:

Nil

Repeaters:

Chris ZS2AAW gave feedback on the current status of the Society's repeaters.

General:

- Neil ZR2NT asked whether the society's bank account was a current or savings account. Clive ZS2RT responded that it was a savings account.

- Al ZS2U advised that the Tennis Club Hall has been booked for the RAE.

- Chris ZS2AAW reminded members that the VW Rally will take place on 9 July.

- The Society is looking into the acquisition of GPS/APRS tracking units to use on the VW Rally cars. We are looking for sponsorships for these units.

- Chris ZS2AAW offered his thanks to those members who volunteered and assisted with the Winterberg Rally.

The business of the meeting ended at 20h23..

Refreshments were served (handled as usual by Bill ZS2ABZ) after which Barry ZR2DX gave a presentation and demonstration of HF Digital modes. 📻

Electronic Warfare

By Mike Hanslow ZS1RMS



What has a beautiful Hollywood actress called Hedy Lamarr got to do with radios? Well, she is the inventor of *frequency hopping* or *spread spectrum*, widely used in both military and civilian applications, the basis of this article.

Though an actress by profession, Hedy Lamarr had a head for technical matters. Together with a music composer George Antheil, she patented the "Secret Communication System" in 1941, a frequency hopping radio controlled torpedo system immune from enemy jamming systems. The invention used slotted paper rolls similar to player-piano rolls to synchronize the frequency changes in transmitter and receiver.

The idea was rejected by the war department. It would only be during the Cuban missile crises in 1962, that the now expired patent would be used not for torpedo guidance systems but for anti jamming communication devices.

The need for secure radio communications dates back to the Second World War. During the War, both sides routinely utilized COMINT (Communications Intelligence), which primarily involved the interception of radio traffic.

The ability of the British and American Forces to routinely intercept high frequency (HF) radio traffic meant they were able to 'crack' Germany's ENIGMA Radio Code, thus giving them a tremendous tactical advantage. Despite this fact, it was not until 30 years later that effective security measures were instigated.

It was the Vietnam War that drove the development of radios incorporating ECCM (Electronic Counter Counter Measures). The Vietcong (VC) were expert at using radio traffic deception. They were known to record US radio traffic requesting air support in bombarding VC positions, then later (once the area was occupied by US forces) the messages would be retransmitted with disastrous consequences. It is against this backdrop that the requirement for a secure

combat net radio emerged – i.e. one that could not be intercepted or jammed.

In the late 1970s the US put forth a tender document for a system known as SINCGARS (SINgle Channel Ground and Airborne Radio Subsystem). This radio was to provide immunity to eavesdropping and jamming by utilizing frequency hopping. The transmitter and receivers within the network (net) would change frequency many times a second whilst maintaining perfect synchronization automatically.

In response, ITT Cincinnati (US), RACAL (UK) and Grinaker (South Africa) all developed VHF combat net radios incorporating frequency hopping. The RACAL and Grinaker frequency hoppers appeared in the market first, as a result of private funding. Unfortunately, the US model lagged behind, given that it was hamstrung by a painfully slow military procurement process.

Frequency hopping on HF was not developed until some time after the first VHF models appeared on the market. Implementing frequency hopping on HF proved to be more difficult, given that HF covers four octaves of frequency as opposed to just one octave at low-band VHF. Furthermore, the propagation medium at HF is much less stable and predictable; the instability of the ionosphere can result in quite dramatic changes in phase delay. Dave Larsen, ZS6DN and his team at Grinaker have claimed to have first pioneered frequency hopping on HF.

Conventional fixed frequency radios are designed to transmit and receive on a single channel. This fact makes them vulnerable to Electronic Warfare (EW) techniques such as interception and jamming. Interception is the unauthorized monitoring of radio traffic, which may place the operator at a severe disadvantage. Jamming is the deliberate

disruption of communication, by operating a transmitter (jammer) on the same frequency as the radio traffic.

Whilst scramblers and speech encryption devices may provide some degree of resistance to the threat of interception, they are ineffective against jammers. Frequency hopping is the only effective counter measure to both forms of electronic attack.

A growing problem for military and aid organizations and peace-enforcement agencies alike is the proliferation of low cost amateur HF radios, which can be easily modified for interception and jamming. This was the case with the UN peace keeping forces in Bosnia.

A frequency hopping transceiver is capable of hopping its operating frequency over a given bandwidth several times a second. Synchronization data is periodically transmitted and decoded to ensure that the transmitter and receiver keep hopping in synchronism with each other, thereby maintaining intelligible communication whilst under severe electronic attack.

The hopping sequence follows a pseudo random pattern, which has an extremely long repeat time. This renders the hopping network virtually impossible to intercept or jam. Ensuring secure military comms is called ECCM, Electronic Counter-Countermeasure.

The term Frequency hopping is used extensively in the military. Spread spectrum though is the same thing and has enjoyed wide civilian applications. Spread Spectrum is used extensively in GSM (cell phone) technology and wireless computer networks, to minimize multipath induced signal cancelling or fading and increase user usage.

But now back to our beautiful brunet. In 1997 she was honoured with an award at the Computers, Freedom, and Privacy conference for "blazing new trails on the electronic frontier." Hedy Lamarr died on January 19, 2000.

Information sourced from various web sites in the Internet.

Our AGM

Members from Bathurst, Aston Bay, Addo and various other places in and around PE were at our AGM on 21 May to make up about 50 attendees. The weather was really excellent for the outdoor activities.

There appears to have been only two cars with goodies in the boot for sale. I noticed Ken Tremeer's vehicle with a number of items that were not yet sold. The stuff certainly looked excellent and was no doubt eventually disposed of.

The meeting went off without a hitch, and although the Treasurer was not present the cash was found to be in order!! The Chairman read out the Treasurer's report, following which there were the usual queries, including why we do not spend our cash. I thought it best not to remind the chap that the interest helps to keep our subs down.

Al Akers was elected Chairman, and the rest of the committee can be found on the back page. Viv Moore was also elected but

has since found it necessary to withdraw.

Trophies and certificates were awarded to the following:

ZS2OB DX Trophy – Barry ZR2DX

ZS2AB Constructors Trophy – André

ZS2ACP

Ham Spirit Trophy – Terence ZR2VDL

Merit Cup – Jim ZS2JF

Appreciation awards were made to ZR2NT, ZS2R, ZS2U, ZR6ACV, ZS2MC, ZS2BL, ZS2AAW, ZS2AZR and Elize Laaks. Elize was not expecting to get an award, and the photograph shows everyone with a grin.

Certificates from the Suidkaap Radioklub were also handed to Trevor and Chris for their repeater work and one to the Club itself.

The braai fires were lit and, while most made use of them, everyone sat around chatting and enjoying the beautiful evening. I guess by 7pm they were all back at home watching television. 📺

Pearstalk



(Some of these items are from SARL bulletins, ZS4BS Dennis Green's HF Newsletter, etc.)

SARL IARU FUND GETS A GOOD BOOST

It is important for South Africa to attend the IARU Region 1 conference to be held in Switzerland in September. This was the decision reached at the SARL Council meeting last Wednesday. At this stage it is not certain how many delegates the SARL will be sending.

"Ideally we should have three delegates to enable the South African Radio League to be represented at each of the committee meetings that do the actual work between the opening and closing plenary", Graham Hartlett, ZS6GJH, said. "It all depends on the amount of funding we can raise.

Right now we have reached our R13 000 target to pay for our annual subscription of the IARU. The fund currently stands at R16 241, so some R3 000 is already available for funding IARU Region meeting attendance. The estimated cost is approximately R12 000 per delegate."

This week the SARL acknowledge the contributions from various people as well as the Sasolburg Amateur Radio Club, which has contributed R425. The Noord-Wes Amateur Radio Club contributed R1 200. Taking the fund to well over R16 000 was a donation of R2 000 from Arnaldo de Sousa, ZS5ADS.

The SARL says thanks to all donors. Your support is much appreciated.

At its monthly club meeting, the Centurion Amateur Radio club collected R270 from its members towards the IARU subscription. Every Rand donated by a member was complimented with a further Rand from the club's coffers to make a total contribution of R540. "The protection afforded to our hobby by the IARU is important to us, and we now challenge all other Amateur Radio clubs to equal or better our effort", said Whitey Joubert (ZR6JJJ), the chairman of the club.

Earlier, the Pretoria Amateur Radio Club celebrating its 75th anniversary this year had

contributed R1 200. At the monthly club meeting the members collected a sum of R350 for the IARU fund. The members agreed that the club would add a contribution on a Rand for Rand basis, bringing the evening's contribution to R700.

Please make your contribution and help to keep the SARL and South Africa Internationally represented. After making a donation please send a copy of the deposit slip to 012 991 5651 by fax, to

saardt@intekom.co.za by email, or to PO Box 90438 Garsfontein 0042 by mail. The account number for contributions is ABSA 560 142 722, Menlyn Park, branch code 335 645.

Cheques should be made payable to the SA Amateur Radio Development Trust.

How about it, PEARS members?

YOUTH DAY

Make a BIG note for Thursday 16 June 2005 – it is the SARL Youth Day activity running from 09:00 to 13:00 on 40, 20 and 2 metres. What are you planning?

TWO MEMBERS CO-OPTED TO COUNCIL

During a Council meeting on 21 April, two persons were co-opted as councillors. They are Hans van de Groenendaal, ZS6AKV, and George Tokarczyk, ZR6ALP.

Hans's portfolio will be public relations and events managing including the RTA program and IARU. George's portfolio will be development together with the president, Graham Hartlett.

ARLS004 NEW AMATEUR RADIO SATELLITE IN ORBIT

HAMSAT (or VUosat) is the latest Amateur Radio satellite in orbit. It is India's first.

AMSAT-India indicates that the UHF uplink will be in the 435,35 MHz range, while the VHF downlink will be in the 145,90 MHz range.

Details are not yet available.

The satellite has not yet been given an OSCAR designation.

EXPEDITION FOR PEACE

The ARI section of Sala Consilina (SA), Italy, wishing to honour and remember Karol Wojtyla, Pope John Paul II, has founded the award "JOHN PAUL II - DXPEDITIONER OF PEACE".

Three awards are available to all amateurs and SWLs:

BASE Award – For having worked or heard at least 40 countries of the 131 countries visited by John Paul II during his pontificate.

SILVER Award – 80 countries worked or heard.

GOLD Award – 131 countries worked or heard.

All the bands assigned to the Radio Amateur Service and all the modes are allowed, satellites included. There are 4 versions of the award: MIXED, PHONE, CW and DIGITAL MODES.

To claim the Award, the QSL cards are not required, but they must be in possession of the applicant and could be requested anytime for checks.

To receive the forms for the award application and the list of the 131 countries visited by Pope John Paul II you can write to the Award Manager Erminio, IZ8AJQ, via E-mail at: iz8ajq@amsat.org

The award fee is 10 Euro or 12 USDs. To receive the Award as registered mail please add 3 Euro or 4 USDs. Application forms must be sent to this address: ARI Sezione Sala Consilina, Casella Postale N.11, Cap 84036 Sala Consilina (SA), Italy.

SOUTHERN AFRICAN PSK CONTEST

On Sunday 26 June 2005, the Lichtenberg ARC will host the first Southern African PSK Contest. The contest is open to all radio amateurs in the Southern African region and will run from 13:00 UTC until 16:00 UTC with PSK activity on 80, 40 and 20 metres.

There are two categories, single operator, all band, high power (less than 100 watt) and single operator, all band, low power (less than 20 watt). The exchange is RST and a serial number.

Contacts with a station in the same call area counts 1 point, contacts with a station in a different call area counts 3 points and a DX

contact counts 0.5 points.

Log sheets must be submitted within 14 days after the contest and can be sent by snail mail to LARC, PO Box 410, Lichtenberg, 2740.

BOLAND AMATEUR RADIO CLUB 40 METRE CONTEST

On Sunday 24 July 2005, the Boland Amateur Radio Club will host the BARC 40 Metre Contest. It is a phone only contest on the 40 metre band, running from 13:00 to 16:00 UTC.

The following rules are applicable:

- The contest is open to all radio amateurs in Southern Africa. Only wire antennas and a maximum output of 100 watt may be used.
- The exchange is the call sign, RS and serial number starting with 001.
- One (1) point may be claimed for each contact made with a station in Southern Africa (no matter which country).
- The Boland ARC club station, ZS1BAK, will be activated and a contact with this station counts 5 (five points), only one contact is allowed.

Log sheets must be submitted within 14 days after the contest and can be sent by e-mail to zs1bak@mailbox.co.za or by snail mail to BARK, PO Box 2105, Dennesig, 7601.

A certificate will be awarded to the 1st, 2nd and 3rd place in the competition.

HELP!

Trusty V51TT says he has obtained an interesting article on an easily built VOX unit. The problem is that the IC is not available in Windhoek and the electronic firms do not show an interest in obtaining same. It is a **Motorola IC MC2830**.

"I would like to publish this circuit in the NARL newsletter but it will be a waste of time if the IC is unobtainable and I was wondering if you could find a source for this IC in the RSA."

Can anybody assist Trusty in finding some **MC2830's**? Email ttaylor@iway.na.

DO YOU REMEMBER LM RADIO?

Please visit the LM Radio website at www.lmradio.org. There is a whole page of jingles and sound bites as well as an essay by David Marks of 3rd Ear Music.

Feedback would be appreciated by our old friend Chris Turner, ZS6GM, now in the UK. 📧

Condolences: We have just heard of the passing on 24 March of Magda, XYL of Albrecht ZS2JC from a heart attack while she was in hospital for an operation. Our heartfelt sympathy to Albrecht and family.

To those celebrating special days (19 June to 23 July) we hope you'll

Enjoy Your Day



... on your birthdays

June

23 Denny Davies, XYL of Tom
ZSL037
28 Ken Tremeer ZS2BWB
28 Pieter Liebenberg ZS2PL

July

3 Julie Scarr ZR2EY
5 Nico Oelofse ZS2N
6 Martin Venter ZS6AZV
7 Jim van Loggerenberg ZS2LR
9 Janet Goosen, XYL of ZR2AG
11 Isaac Greeff ZS2ZG
13 Cyril Hislop ZS2EJ
16 Hendrina Pearson, XYL of
ZR2GLP
19 Bill Browne ZS2BY
19 Arthur Baynes ZR2ARB
20 Sally Jacobs, XYL of ZS2BW
20 Vic Olivier ZS2SZ
22 Beavan Gwilt ZS2RL

... on your anniversaries

June

20 Bernice and Bryan Marshall
ZS1NQ
24 Ali and Ewan Mathieson ZS1EM

July

2 Sally and Donald Jacobs ZS2BW

4 Marge ZS2OB and Brian Weller
ZS2AB
10 Hendrina and George Pearson
ZR2GLP
12 Julia and Bill Atteridge ZS2V
12 Joan and George Bowes ZS2QN
12 Liz and Allen Lubbe ZS2AEG
13 Janet and Ashley Goosen ZR2AG
15 Magret and Martin Ras ZR2MR



Greetings from Chris Turner ZS6GM in the UK. Says we should look at his website www.lmradio.org (that's an "L" as the first letter) which has to do with the good old days of LM Radio.

Congrats to our four new operators Stefan Smeda ZR2VV, Andro Koutsoudis ZR2DEK, Christo Becker ZR2CB and Barto de Koning ZR2BDK. We hope you will be active and join us on the various bands.

Gallstones: As reported last month, Judy Tremeer, XYL of ZS2BWB, was in hospital in mid-April to have *eleven* gall bladder stones removed, *but they also took out the gall bladder itself*. She's looking great, and one wonders why we have these unnecessary bits and pieces in the first place. 🗿

Your Society's Committee

Chairman	Al Akers ZS2U	360-2983	makers@firestone.co.za
Vice Chair, Awards	Rory Norton ZS2BL	585-9330	rory@commco.co.za
Secretary	Chris Scarr ZS2AAW	368-1344	cvscarr@intekom.co.za
Treasurer; Assets Control	Clive Fife ZS2RT	367-3203	cfife@absamail.co.za
Repeaters, packet,	Chris Scarr ZS2AAW	368-1344	cvscarr@intekom.co.za
Refreshments	Bill Hodges ZS2ABZ	581-2580	whodges@absamail.co.za
Contests	Al ZS2U, Barry ZR2DX, [+ Mike Bosch ZS2FM (581-2425)]		
Other Committee Members	Ewald Bouwer ZS2EHB; Terence van der Linden ZR2VDL; Glen Cummings ZS2GV		
Social, Special Events	COMMITTEE		
QSX printing and info	Ashley Goosen ZR2AG	468-0887	ashleygoosen@xsinet.co.za
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QSX distribution (ex com)	Trevor Scarr ZS2AE	367-1746	t&j.scarr@intekom.co.za
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Internet Website (ex com)	Barry Murrell ZR2DX	581-3561	zr2dx@mweb.co.za

PEARS' VHF/UHF & Other Services

REPEATERS

Town VHF	# 145,050/650	Knysna	* 145,075/675
Town UHF	# 431,050/438,650	Lady's Slipper	* 145,100/700
Cockscomb	145,000/600	Noupoort	* 431,150/438,750
Colesberg	* 431,075/438,675	Uitenhage	# 145,075/675
Cradock	* 145,050/650		
Grahamstown	* 145,150/750		

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

OTHER SERVICES

Packet Bulletin Board (ZSØNTP)	144,625
Packet Rose Switch ZSØGHT-3,046101 (144,675 in/out) or 046102 (UHF out to BBS)	144,675
2m Beacon (ZS2VHF CW ID, FSK) (horizontally polarized, 20W ERP,)	144,415
6m Beacon (ZS2SIX CW ID) (horizontally polarized, 25W ERP)	50,005
6m Simplex Link with Lady's Slipper 2m Repeater (vertically polarized)	51,400

Sunday Bulletins

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

Date	Prepare and Read on 2m Repeater Link	DIARY DATES
19 June	ZS2ABZ	<i>JUNE</i>
26	ZS2EHB	16 SARL Youth Day
3 July	ZR2VDL	23 PEARS GENERAL MEETING
10	ZR2GV	26 Southern African PSK Contest
17	ZS2U	<i>JULY</i>
24	ZS2BL	7 Wrinkly Rave
		8/9 VW Rally
		24 Boland ARC 40-metre Contest

* We like being your Society *