


THIS NEWSLETTER IS PUBLISHED BY THE
PORT ELIZABETH AMATEUR RADIO SOCIETY

P.O. BOX 10402
LINTON GRANGE
6015

July 1997

 Please note the change of evening for our July meeting!

NOTICE OF MEETING

The monthly general meeting of the **PORT ELIZABETH AMATEUR RADIO SOCIETY** will be held on **Friday, 11 July 1997** – **NOTE THIS IS A WEEK EARLIER THAN USUAL!!** – commencing at 20:00 (8pm) in the Municipal Disaster Management Centre in Westview Drive, Mill Park, Port Elizabeth (Civil Defence Centre).

This will be the opportunity for Al's final briefing of operators assisting with communications for the VW Algoa Rally, so all concerned are particularly requested to attend. If the briefing does not take us up to the usual time for final dissipation [don't hear *that* term much these days!] you can stand around gabbing with your gabbas.

And of course you can guzzle and chomp during the break after slipping a sliver of silver into the saucer specially set in a suitable spot for such use.

Technical Talk

The regular technical get-together will take place on **Thursday** (not the usual Wednesday) 17 July at the clubhouse, starting at 20:00. For those who have nothing better to do before the start, the door will be opened around 19.30

At the most recent gathering, Stoffel displayed the 2m transmitter in the process of construction for the BACAR project but, because he is snowed under with other work, he has had to pass on the job of completing it and Neil Thomas has undertaken the task.

Also displayed was a 2m receiver that Alan Bent (what's your callsign, Alan?) is busy putting together.

NOTE – For the next month or so these get-togethers will take place on the *Thursday evening following the Society's general meeting and not the Wednesday as heretofore.*

This is to determine whether Thursday evenings suit more members. Wednesdays are inconvenient for some prospective attendees.

*

Subscriptions

If you have not received this copy of QSX it is probably because you have not renewed your subs. Come on, man! Shake a leg!

Ω



A word

from the Chair

I was disappointed to have missed my first general meeting as Chairman, but was suitably comforted in the knowledge that all would be well under Beavan's expert supervision.

With all the drive for more social activities, I was also sad to learn that there was little or no support for another proposed treasure hunt later in the year. If the type of activity concocted (???) by the committee is not of interest to you, why not drop us a hint of what YOU would like to attend as a HAM society social? Maybe the cold weather has closed the doors on social interaction for a lot of us...

The VW Rally is sure to lure a couple of the stalwarts out into the cold, however, and as always, tends to generate a lot of action and enjoyment, along with some pressured operating for all of us. Remember that we are a service to the community, and at the same time can make use of the publicity the event affords.

The greater HAM community in South Africa is forever in change, by the looks of things, and now Hamnet is under the spotlight. I sincerely hope that the demands made by the SARL for membership do not drive its existing members away.

On the membership issue, please remember to submit your annual subscriptions to PEARS, as we would hate to lose your support. I trust that the various services the PEARS has to offer make it well worth your while.

73,

Chris, ZS2AAW

Hamnet General Meeting

The next general meeting will take place on Wednesday, 6th August at 1930 at the Municipal Disaster Management Centre. Some important decisions will need to be made at this meeting.

The decision of League Council to limit Hamnet membership to members of the League will mean that Hamnet East Cape will have fewer than ten members. I fail to see how we can function effectively with so few members. The changing and fettering whims of Council make it almost impossible to build up an effective emergency organisation. It is especially so due to the lack of communication from headquarters to the various provinces.

As it seems most unlikely that there will be a change of heart on the part of Council, it will be proposed at our meeting to form a Provincial emergency service for a trial period and the following proposal will be open for discussion:

- Suggested name be East Cape Amateur Radio Emergency Service (ECARES).
- The directorate will be the same as the Hamnet Directorate in order to provide the most effective liaison between the two services and have representation at SATEPSA meetings with immediate effect. We will also have an infrastructure which is already functioning.
- ECARES will be open to all amateurs, who will have a choice of a group or groups in which they wish to serve. These are:

- **Monitors**

There may well be recommended monitoring practices, but it will be for the member to decide on the extent of his involvement.

- **Base Station Operators**

This group can be sub-divided into Home, Other and Control station operation.

- **Field Station Operators**

This group can be sub-divided into Own and Other field station operation.

- **Modules**

As these make good sense, it is proposed to apply these, but on an incentive basis. It is proposed that there be two grades of membership. Grade A will be members who have passed at least four modules and Grade B will be members who have passed fewer than four modules.

The important features of this proposal are:

- ECARES will be open to all amateurs.
- The extent to which a member is involved will be entirely his decision.
- A member has a choice of activities in which he may be involved.

We amateurs should ALL be working together to protect our interests and to provide a service to society.

73

Al Akers ZS2U
 Provincial Director,
 Hamnet East Cape.

VW Rally



The rally is scheduled for Friday 18 and Saturday 19 July and will be run in PE, Uitenhage and the Longmore Forest. Briefing for the rally will be at the Society's general meeting on **Friday, 11 July**.

All participants in the rally communications are asked to make a

special effort to attend. Maps, instructions etc. will be handed out.

Several more volunteers to assist with rally communications are needed so, if you are interested and have not yet let Al know, please telephone him at 30-2983 right away. You *will* enjoy the exercise.

Did You Know? from Practical Wireless, May 1985

In 1907, Marconi's mighty Clifden station was powered by steam engines totalling 1100 horsepower. To establish a wireless telegraphy link across the Atlantic with his station at Glace Bay, Canada, Marconi in 1907 built an unprecedentedly powerful 300 kilowatt transmitter at Clifden, in the west of Ireland. He used steam engines developing a total of 1100 horsepower to drive high-voltage direct-current generators which operated in conjunction with his newly invented high-speed "disc discharger".

His 1.16 μ F capacitor consisted of 1800 sheets of galvanised steel 9m x 3.8m

suspended from insulators and separated by a wide air space. It operated reliably at 80 000 volts and occupied a huge building over 100m long. The directionally aligned antenna stood 62m high and, utilising over 18km of wire, covered an area of one-twentieth of a square kilometre.

Owing to the remoteness of the site - the only access was by means of its own light railway - the steam engines had at certain seasons to be fired by peat dug from the surrounding bog.

The station operated successfully until 1921, when it was blown up by Irish rebels. Q

MINUTES OF THE MONTHLY GENERAL MEETING OF THE PORT ELIZABETH AMATEUR RADIO SOCIETY, HELD AT THE MUNICIPAL DISASTER MANAGEMENT CENTRE, MILL PARK, PORT ELIZABETH ON FRIDAY, 20 JUNE 1997

Opening & Welcome: Acting Chairman cum Secretary Beavan opened the meeting, and welcomed the guest speaker, Cor de Wit ZS2CG.

Present & Apologies: As per the register.

Guest Speaker: Cor de Wit gave a very interesting talk on the principles, manufacture and uses of optical fibre cable.

The traditional tea break was then taken, after which the meeting was resumed.

Minutes of the Previous Meeting: Adopted: proposed ZS2BWB, seconded ZS2VM

Matters Arising: Nil (even Viv had nothing to say!) [and *said so* - Ed.]

Finance & membership: As reported by Clive ZS2RT, our worthy Treasurer:

Savings account = R3309.79, investment account = R20443.97

Paid up members approx 100, unpaid approx 57.

Correspondence:

1. Receipt of 1997 ARRL Handbook for our library. Included with the handbook was a stiffy with various interesting programs pertaining to our hobby. The stiffy will be held in safe-keeping by Secretary Beavan.
2. Letter from RSGB in reply to our request for info about the rules governing IOTA awards. This will be further dealt with by the Committee.

General:

1. The meeting agreed that a donation of R100 be made to Hamnet.
It was also felt that we should write to HQ and object to their requirement that an individual must first be a member of the SARL before he/she may join Hamnet, and that HQ had an obligation to support Hamnet financially.
2. The Secretary was requested to query HQ on what the ruling was concerning the percentage SARL membership required before a club may affiliate to the League. Was it still 70%??
3. Lynne ZS2MM tested support for various types of social activities:
 - There was a singular lack of excitement at the suggestion of a treasure hunt.
 - There was moderate support for a travelling supper.
 - There were many smiles and cheers at the suggestion of a somewhat delayed Xmas dinner/lunch.
4. Trevor ZS2AE mentioned that operators were required for an off-road event to be held on Saturday 12 July. The necessary volunteers came forward. ◇PAGE 8

Fiddlers' Corner

Low-cost Metal Detector

REV. T. SCARBOROUGH, CAPE TOWN
(FROM PRACTICAL ELECTRONICS, JULY 1995)

When tuned correctly, the metal detector illustrated will detect an old penny at a depth of 10cm, although for practical purposes 5cm may be more realistic. It will detect large objects at 25cm and more. It is extremely simple and cheap to build and has minimal ground effect. The circuit draws less than 10mA current from a 9V PP3 battery.

The metal detector is based on the BFO (beat frequency oscillator) principle and incorporates two high frequency oscillators, both running at approximately 300kHz. IC1a and IC1b oscillate at a fixed frequency whilst IC1c is a variable frequency oscillator whose frequency is highly dependent on the inductance of coil L1. The outputs of both oscillators are mixed through IC1d, producing an audible beat frequency.

Two coils were tested, one of 50 turns of 33 s.w.g. enamelled copper wire 22cm in diameter, the other of 40 turns of 30 s.w.g. 24cm in diameter. It was found that the winding technique for the coils was not critical. Although the circuit is stable in operation, ceramic capacitors were found to introduce instability and are therefore not suitable. Polyester types may be best.

The output is connected between IC1d pin 11 and the 0V rail, and may drive a set of headphones, a crystal earpiece or an amplifier. If an unclear note is heard, experiment with the values of the capacitors C1 to C3.

In order to tune the metal detector, adjust potentiometer VR1 to a zero beat setting (i.e. silent output) between the loudest frequency peaks. Then tune a little either way to find a low tone. A 10 Ω potentiometer in series with VR1 may simplify adjustment.

In use, a change of tone will indicate the presence of metal.

With a smaller coil, this metal detector may also be used as a pipe or cable locator.

The circuit diagram appears on the next page.



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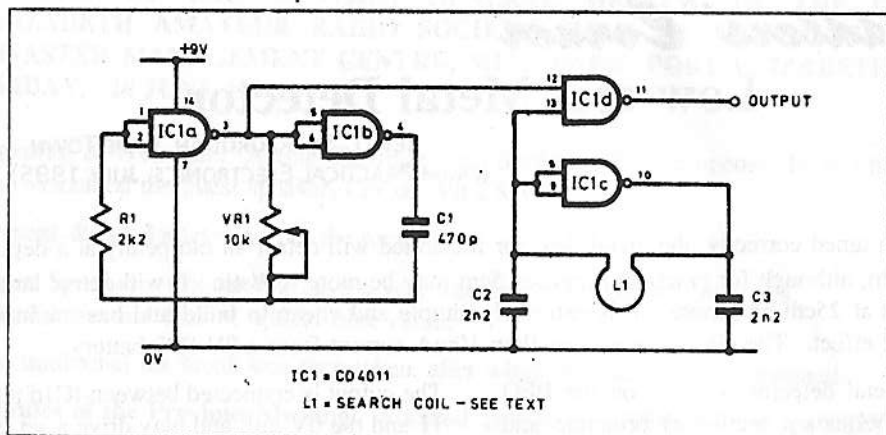
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Circuit diagram for the low cost Metal Detector.

MINUTES [FROM PAGE 6]

5. The Acting Chairman presented the following trophies:
 - VHF Trophy to Alex ZR2T
 - DX Trophy to Chick ZS2LM (received on behalf of Chick by Ken ZS2BWB, because Chick was dealing with a kidney stone problem.
6. Al ZS2U gave members a brief outline of the route that the VW rally would be taking.
7. Viv ZS2VM reported on the progress of our BACAR project. Stoffel ZS2C was making good progress with the transmitter, but it appears that the promised balloon had not yet made its appearance.
8. The next technical meeting will be held on a Wednesday as usual, BUT THEREAFTER IT WILL BE HELD ON THURSDAYS.

Closure: The meeting ended at 22:00.

☐ What the Secretary really said was that Chick was "dealing with a klippie that had taken up residence in his body. A very plausible theory goes that it is due to an inadequate intake of beer, thus allowing crystal formations to develop and grow instead of being flushed away in more ways than one."

[No, I don't think that could have been the reason. I base my opinion on the way Chick slurs his Rs on CW - Ed.]

The DOUBLE QUAD

for 2m or 70cm by DL7KM

FROM AN RSGB ARTICLE TRANSLATED BY ZS6BLR,
REHASHED WITH THANKS FROM MIDLANDS ARC'S
HAMS HAYWIRE NEWS

This beam can be constructed for either 2 metres or 70 centimetres. The gain is approx. 9 dB over a $\frac{1}{2}\lambda$ dipole, and attenuation off the back is about 25 dB.

Dimensions for both bands are given in the diagram but spacing and lengths mentioned in the following text relate only to the 2 metre version.

For the quad section, 16mm^2 (5mm diameter) wire, obtainable at electrical supply shops, may be used. Each side of the quad loops is 52cm (i.e. $\frac{1}{4}\lambda$) long.

The reflectors are made of 8mm diameter aluminium tubing with a wall thickness of 1mm, and each is 1050mm in length. Note that the reflectors could be replaced with a single piece of wire mesh measuring 1100 x 1800 mm with a mesh size of 30 to 50mm. This gives an additional gain of 2 dB.

The distance between the reflector and the quad has to be adjusted again when you use mesh material for your reflector. To do this adjustment for SWR, the antenna should be placed at a height of approx. 2.5λ . Alternatively, the antenna can be tilted at a 45° angle upwards, but there must be *no* obstructions in front of the antenna as they have a great influence on the SWR.

The spacing between the reflectors is 510mm, the middle reflector being aligned carefully with the feedpoint at the centre of the quad loops. The impedance at the feedpoint is near enough to 50Ω , so the antenna can be fed with 50Ω coax. The

outer screen and inner conductor of the coax are respectively connected to the points marked X in the sketch.

The quad loops are fastened to the supporting mast with insulating material. Since these points carry maximum current but minimum voltage it is unnecessary to have high quality insulating material there.

Both the spacing between the reflector elements and between them and the quad elements are quite critical. Therefore, it is best to construct the reflector mountings in such a fashion that one can alter the distance between reflector and quad in order to achieve the best SWR.

The feedpoint should be housed in a plastic box, slots being made in the sides to accommodate the quad elements. When the cover is fitted, all gaps should be closed off with an outdoor type sealant to ensure that it remains watertight.

With the mast mounted vertically, as in the drawing, the antenna is *horizontally* polarised!

If the supporting strut of the middle reflector is made of hollow tubing, the coax can be routed via this strut into the plastic box through its back wall. Ω

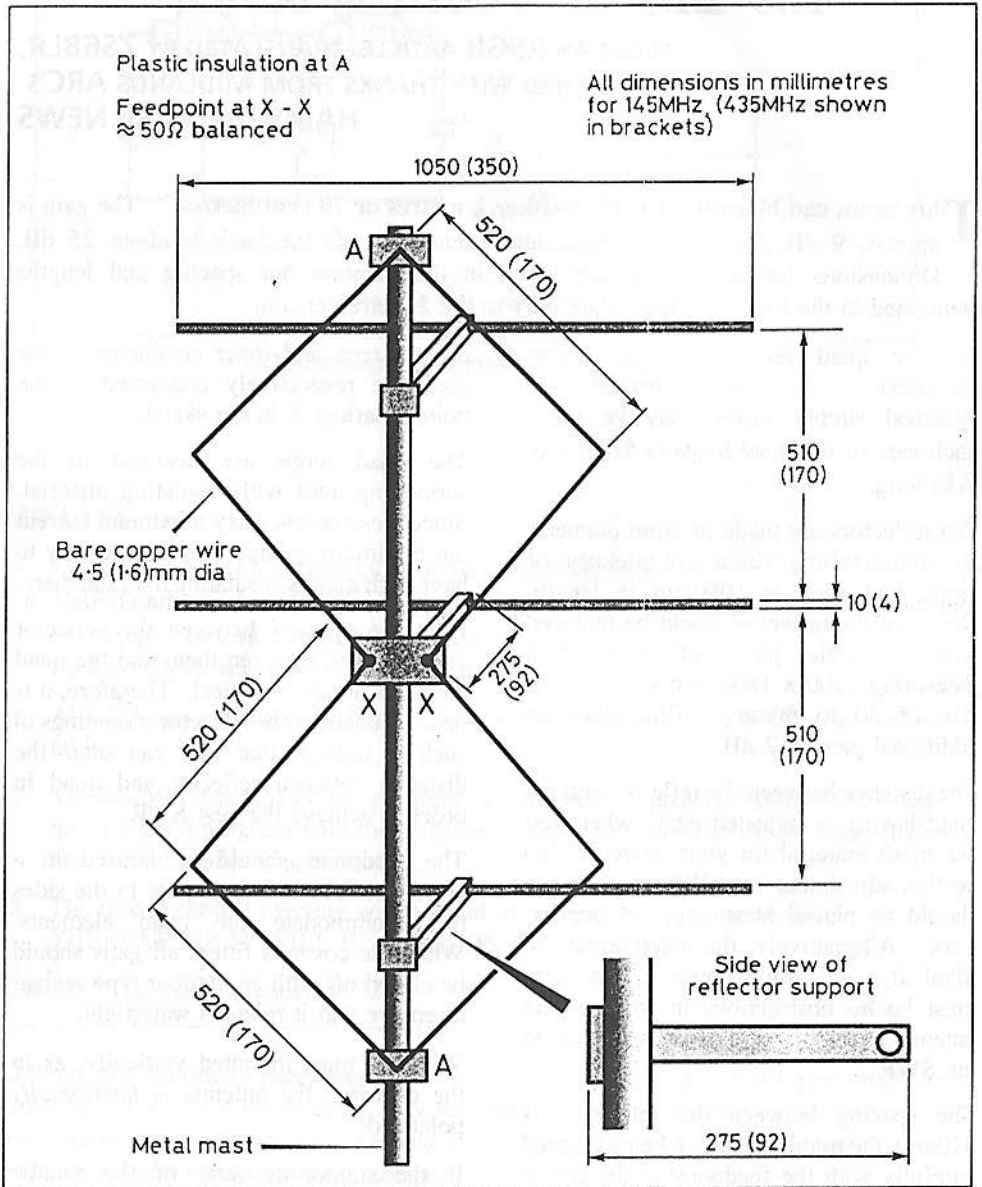


Fig 1: DL7KM's Hybrid Double-Quad with dimensions for 145 (435) MHz.

PEARStalk

President's Net

The SARL runs a net on 7082 kHz from 12:00 to about 13:00 every Sunday to enable members (and, I believe, non-members too) to ask questions and offer suggestions about League and amateur radio matters. Several Councillors are on call to respond to matters falling under their respective portfolios.

Although known as the "President's Net", President Chris Turner does not necessarily run the show himself every Sunday but appoints one of the supporting Councillors to do so. Even if you do not wish to join in yourself, it is interesting to listen to the views and ideas of other hams and the responses from the Councillor. However, this is your opportunity to make your thoughts known so you should make use of it.

Repeater Changes

Chris and Trevor Scarr and XYLs, plus some of the amateurs from the Southern Cape, visited the George and Knysna repeater sites last month to carry out some improvements. At the same time, Chris changed the Knysna repeater channel to 145,150/750 MHz in an attempt to escape the interference that had been bedeviling the linked repeater system.

Before rushing off to acquire new crystals, however, please note that there is still QRM and it is likely that the channel will be changed again, this time trying 145,075/675, so stick around.

There is also a bad cell in the battery and Chris would be happy to hear of a suitable battery going begging. The repeater uses

a 24V 100 AH bank.

The receiver's oscillator at the George repeater is also thought to be causing distortion and this will be attended to.

CW Classes on 2m

Chick Mosley ZS2LM has started his series of morse classes on 2 metres, starting just after the last stragglers on PEARs' Sunday post-bulletin net finally sign off *finally*. That's about 09:45.

Please call in to let Chick know how many people are making use of his efforts. If you wish to telephone him, you can reach him at 54-1594.

SARL Bulletins

Our remotely controlled facility for relaying the SARL bulletin onto our linked repeater system on Sundays played tricks with us recently by drifting off frequency. As a result, the voice came across very low-pitched and readability was sometimes difficult. Thanks to Bill ZS2ABZ who assisted with live relays.

Although the receiver is crystallised for reception on 7066 and 7082, the 7082 HQ transmission for reasons unknown are generally missing or late, so even if that crystal was still on frequency there has been nothing to relay on most Sundays.

Isn't it strange how many hams are still unaware of the HQ bulletin frequencies, let alone those of the clubs? It is a regular occurrence for stations to start calling their pals just a kilohertz or two away from an active bulletin frequency. Perhaps they cannot hear the bulletin station due to skip but one expects that

even new hams, if they tune across the bands often enough, should get to know at least the HQ and Hamnet frequencies and bulletin times and avoid them. All too often, however, the offending stations are some of the older hams.

Hamnet

As you will see from the Hamnet notes elsewhere in this issue, SARL Council has decided to control Hamnet with a heavy jackboot and has ruled that all members of Hamnet must, after all, be paid-up members of the SARL. Among the irrational arguments to support their decision are:

Members of Hamnet must place themselves under the control of Hamnet and, since it is a League organisation, this is only possible if they subject themselves to the rules and regulations by joining the SARL

Volunteer fire fighters have to formally join the fire brigade and subject themselves to the applicable rules and regulations

Ditto, by analogy, the St. John's Ambulance volunteers.

Talk of confused thinking! With its own constitution, any person joining Hamnet would clearly undertake to abide by the rules of that body. So far as the other silly statements are concerned, fire departments and first-aid organisations are happy to give advice and training to the personnel of businesses and other bodies, and they do not demand that you first join their organisations.

This latest, sad and shortsighted SARL Council decree has already unleashed a hornet's nest of criticism. It is set to fragment Hamnet as the new SARL

Constitution has done to the League, and it will undoubtedly further alienate the dwindling number of League members. Will Council *never* learn?

MIR Takes a Bashing

As you have seen on TV, MIR was involved in a collision with an unmanned supply vehicle (no taxis up there) and it nearly took out our latest Hamtronaut Mike Foal, KB5UAC. Mike had been active on voice under his own callsign (in addition to the usual RØMIR packet radio facility) but normal ham activities were shut down for a while to conserve power pending stabilization of the situation.

However Mike has been heard chatting happily on voice again and we believe that the packet system is also operating normally.

Just before the accident it was announced that MIR would henceforth use 145,985 instead of 145,200/800 because of high QRM levels that possibly deterred the Russian astronauts from using voice. There was an immediate outcry from some quarters and MIR has reverted to the use of 145,200/800 for voice and packet. He has nevertheless continued to use 145,985 simplex while chatting with a particular KZNatal station.

Wonder if all the talking makes Mike Foal a little hoarse?

Support our Advertisers

Well, we don't really have *that* number of advertisers, but we do get a fair deal from our printers, so if you need any printing done - not only QSL cards or other ham stuff - don't forget to call on the bods at Instant Printing. They are helpful and friendly and you *really* get service with a smile. In fact, they often laugh out loud,

like when I drop off QSX for printing and say I'll call back for it a little later.

Seriously though, the IP people bend over backwards for their customers, sometimes to their regret - Robin sprained a back muscle recently.

RAE Results

It is good to note that five of our six candidates who wrote the recent RAE made the grade. The candidate who was less fortunate has already indicated that he will go for it again in November. A seventh candidate turned up at the RAE venue - a day late! What should we do with him?

The successful candidates are listed on page 15. Thanks are also due to the lecturers.

Ham Radio at the Cinema

Another movie has featured Amateur Radio prominently in its plot. Look for "Contact", which will probably be released in South Africa later this year.

SARL Callbook

In a recent President's net, Chris Turner confirmed in response to an enquiry that anyone who was a member during the 1996/97 League year will receive a free callbook when it is printed, even if that happens only in the new League year and the member has not renewed for 97/98. Rising to the defence of the League in a recent packet message, one of the newer Councillors said just the opposite.

Since the callbook was one of the benefits of membership promised in recruiting plugs as far back as 1995, when the callbook was actually due out, it would seem that anyone who was a member at

any time since then should in fact be entitled to a free copy.

Apparently the callbook is still another two months or so away from delivery. If

Criticism by Packet

There has been a long, on-going debate on Packet about the SARL, prompted by the recent unyielding decision about Hamnet membership. Some of the terminology and unpleasant mud-slinging has been regrettable and those responsible need to be reminded that Regulation G5 prohibits, *inter alia*, insulting, improper and obscene language.

Several operators, however, have expressed dismay not over the terminology as much as the use of packet radio to express dissatisfaction with the League or Councillors' actions. They feel that objectors should write letters to Council or Radio ZS.

However, we know what happens - or does *not* happen - to letters to HQ, while letters to ZS take months to appear if they do at all, and replies from readers another two months, by which time the matter has lost its impact.

Moreover, under the new bright scheme of things, Radio ZS is no longer even received by *all* members of the SARL so it has totally lost its usefulness as a medium for debate.

Packet Radio, of course, has the advantage of immediacy and, bearing in mind that it is accessible only by licensed hams, there is really little difference between a debate through this medium (limited to @ZAF) and one through the pages of Radio ZS.

All that is needed is discretion in one's terminology. Ω

Congratulations...

on your birthdays:

July

- 22 Beavan Gwilt ZS2RL
- 26 Daniel Burger ZR2B
- 29 Des Pettit ZS2ABU

August

- 1 Mandy Masters XYL of John ZS2AAN
- 2 Sharon Layton ZS2SL
- 3 Louisa Taljaard XYL of Ben ZR2CS
- 6 Julia Atteridge XYL of William ZS2V
- 11 Ben Schilder ZR2ABE
- 15 Annamarie Barnard XYL of Attie ZR2DY

on your anniversaries:

July

- 22 Terry & André de Ridder

August

- 4 Annelise & Mark Venter ZR1MLV
- 5 Shirley & Tom Cockbain ZS2TC
- 9 Annamarie & Attie Barnard ZR2DY

on your engagement Mike Poulter to Yvette Vice. Saw this in the paper and we assume that's our Mike ZR2LM!

on passing the RAE Elizabeth Chatterton, Neil and Nicolas Thomas, Ron Fitzmaurice and Gavin de Villiers. Hope you are listening to the Sunday morning morse classes on the linked repeaters.

Pick list: Old man Jeff ZS1VS has been poorly for a while and to add to the misery his car has let him down. We are thinking of you, Jeff and hope you make a quick recovery.

Gadding: John Magee ZS2RG to Gauteng for three weeks; and we hear Bill ZS2ABZ slipped off to Mauritius (no doubt armed with powerful binoculars) for a fortnight recently.

Welcome back: Mervyn Akers ZS2F has returned to PE from Cape Town. Good to have you back, Merv. Also our Dick, ZS2 R-omeo S-presso, back from whatever he does in the UK.

Commiseration to Ewan Mathieson ZS2EN, who injured a foot and wrote off his car in a prang with an unusually wide, unlit oncoming trailer while returning to G'town. Hope the foot heals quickly, Ewan.

FOR SALE ★ WANTED ★ SWOP

FOR SALE

- ★ Yaesu FT200 transceiver in excellent condition, R550 - John Hugo ☎ [0464] 25-0678 or write PO Box 11, Bathurst 6166

Your Society's Committee

Chairman, Repeaters, Packet	Chris Scarr ZS2AAW	38-1344
Vice Chairman; Social	Dick Schönborn ZS2RS	38-5070
Secretary; Awards	Beavan Gwilt ZS2RL	30-6968
Treasurer; Assets Control	Clive Fife ZS2RT	32-3203
Social; Assisting with Assets Control	Lynne Crothall ZS2MM	35-4671
assisting with refreshments at meetings	Bill Hodges ZS2ABZ	51-2580
QSX Manager	Trevor Scarr ZS2AE	32-1746
assisting as QSX Editor/layout	Garth Laaks ZS2HB	38-1101
Technical Classes	Des Herselman ZR2DH	54-2911 (W)
	Cell 083 261 5402 (All Hrs)	

PEARS' VHF & Other Services

REPEATERS

Town VHF	145,050/650	Kareedouw	† 145,125/725
Town UHF	431,050/438,650	Knysna	*145,150/750
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

* The East London 145,125/725 MHz repeater and the George repeater on 145,100/700 are linked to PE's long-range 2m repeater system.

† These are privately owned repeaters and are not included in the PEARS linked repeater system.

OTHER SERVICES

Packet Bulletin Board (ZSØNTP)	144,625
Packet Rose Switch (ZSØGHT-3,046101/046102)	144,675
2m Beacon (ZS2VHF CW ID)	144,910
6m Beacon (ZS2SIX CW ID)	50,005
6m Link with Lady's Slipper 2m Repeater	51,400
Wefax Relay (Meteosat)	145,350

Sunday Bulletins

PEARS bulletins are transmitted on Sundays immediately after the SARL English transmission, i.e. at about 08:45, on 7098 kHz as well as the 2 metre linked network that provides coverage from East London to George and environs via repeaters on 145,750 MHz (Grahamstown), 145,700 (PE Slipper), 145,750 (Knysna), George's 145,700 and East London's 145,725. PEARS' 7098 or 3640 kHz transceive facilities are also remotely linked as needed. In addition, the SARL's 40m transmissions on 7082 or 7066 kHz can be remotely patched into the 2m network.

Date	Prepare and Read on 145,750	DIARY DATES
13 July	ZS2RT	JULY
20	ZS2AE	11 PEARS Monthly meeting
27	ZS2MM	17 Technical get-together
3 Aug	ZR2DH	18/19 VW Rally
10	ZS2AAW	AUGUST
17	ZS2RS	3 SARL Phone contest
		6 Hamnet General Meeting

★ We Like Being Your Society! ★