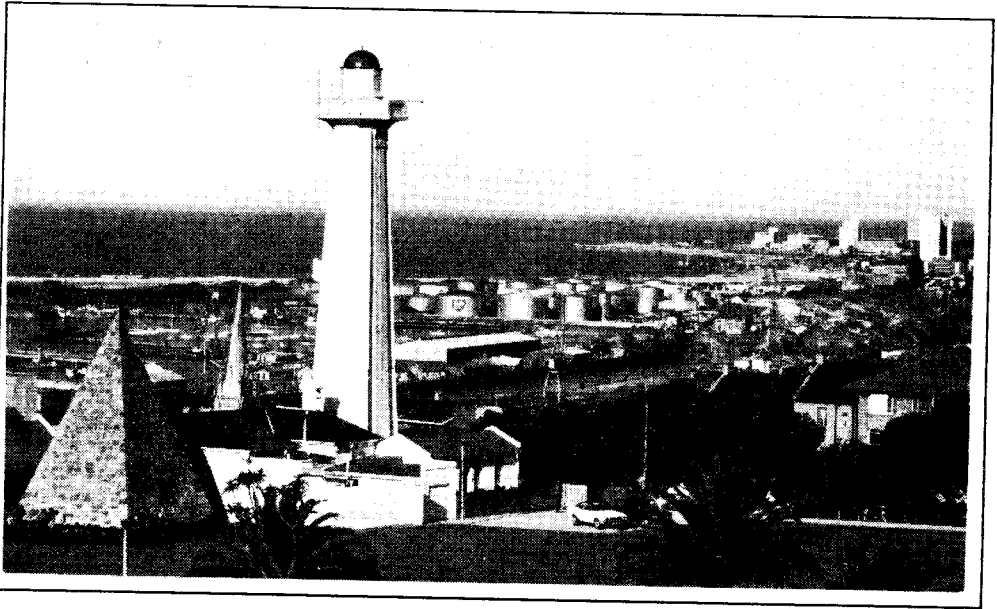




S X

P E



**THIS NEWSLETTER IS PUBLISHED BY THE
PORT ELIZABETH BRANCH OF THE
SOUTH AFRICAN RADIO LEAGUE**

**P.O. BOX 10402
LINTON GRANGE
6015**

June 1995

MONTHLY GENERAL MEETING

PLEASE NOTE THE CHANGE OF DATE for the monthly general meeting of the Branch this month – *FRIDAY, 23 June 1995*, i.e. the *fourth* instead of the usual third Friday of the month. The venue will, as usual, be the Civil Defence Centre, Westview Drive, Mill Park, Port Elizabeth. The meeting will commence at 8 pm (20:00) sharp, or thereabout, whichever is the later.

Business will rapidly give way to a talk by Ms Olga Williams of Vodacom dealing with the cellular telephone system. She will be supported by a technical representative so you will be able to ask questions to your heart's desire.

Tea, coffee and eats will be available during the interval. Your friends are waiting eagerly to chat to you over a cuppa and a munchie or two.

SILENT KEY

DEREK SEGAL

We were saddened to learn of the passing of Derek Segal, ZS1DP, on 31 May 1995, while he was holidaying in Norway.

Derek played a leading rôle in SA Radio League affairs for many years and served as President of the SARL during the 1980's. Although in poor health for some time, he retained a keen interest in Amateur Radio and League affairs to the end.

We extend our heartfelt sympathy to his wife Isobel and family.

TechniChat and QRP Project Groups

The monthly informal *TechniChat* will take place at the Civil Defence Centre in Mill Park on **Thursday, 29 June, starting at 19:30**. The subject for discussion was not yet decided as we went to press, so listen to Branch bulletins. Whatever the topic is, a **pleasant and informative evening is assured, so roll up!**

Members of the QRP project construction group should please note that the components for the first stage of your project (the VFO) will be distributed at a get-together at the CD Centre on **Tuesday, 13 June, at 20:00**.

CQ DE ZS2RL

My abject apologies to all who eagerly awaited the INTECNET session on Sunday, 28 May. Problem-free sessions in the past bred complacency, with predictable results. The moral of the story is: take nothing for granted!

Those who have served in the army will know that pain and suffering breeds camaraderie and fellowship. Similarly, those who toiled atop Governorskop on Saturday, 27 May in the cold and the wet, all agreed that it was nice getting together again. Some said it was sweat to be seen on the brows of the labourers, others said it was the rain ... I dunno, but fourteen pounds of steel at the end of a shaft is mighty heavy! Thanks to all who put shoulder to the wheel.

THE VW RALLY IS JUST AROUND THE CORNER!

Elsewhere in this worthy publication is a **questionnaire** concerning the rally. Please fill it in and give it to me at the monthly meeting on 23 June. For obvious reasons I need to know who want to participate and what their preferences and capabilities are. Please do not leave it to the last moment - it is not good for my ulcers.

We have a minor dilemma with our **HF bulletin relays**. There are some folks who are out of 2m range and are also skip on 40m, and they would like to see (hear?) an 80m relay. But only one HF relay can be cross-banded to 2m ... which is it to be? Is an 80m relay warranted? For the next few weeks Garth ZS2HB will be doing a **relay on 80m** to test the coverage and support for 80m. However, we will be reluctant to start a second net on HF.

Finally, don't forget that we agreed that we would all make a voluntary (= you pay or else!) contribution of R12 towards QSX. That time is nearly here, so our Treasurer will be glad to renew acquaintances.

73 *Beauvan*



Parrot Talk



Oops! We erred last month in suggesting that the parrot repeater that some Border packeteers erected to help them access the East London BBS was owned or operated by that Branch. We reported that it unfortunately created problems for itself as well as other users, even those trying to access the PE Branch BBS. OM Colin ZS2CR, Chairman of the East London Branch, writes:-

"The [parrot] digipeater is a private one belonging to Ken ZS2FW of King Williams Town and has no connection with the East London Branch. It was installed because packet users in the King and Lower Albany areas could not access a BBS after the ZSØGHT digipeater was moved. Whilst it met their needs very well, many users in East London found it to be a nuisance.

"Some operators feel that another digipeater installed at the same site that Ken used would have met the needs of those who benefited by the parrot without hassle to other users, and would have been cheaper too".

Happily, the parrot has had its beak scaled and Gerald ZR2GB has offered a laptop computer to the Kaffrarians for use as a digipeater with a Baycom interface. Thanks, Gerald.

Meanwhile, we are pleased to report that Phil ZS2PP and Ewan ZR2AAR have resurrected the PE Branch digipeater on a completely new site near Grahamstown and, although it does not yet have its final, more efficient antenna system, it is working very well. These worthy lads scoured the area and sweet-talked the owner of one of the promising sites. As Phil says, it may not be the optimum spot for coverage but it has mains power, accommodation and security laid on, and it is fulfilling its primary function nevertheless.

Our Repeater Working Group wallahs have also been active up at the voice repeater site outside Grahamstown and have concreted in some new stays and made various general improvements to the site. Thanks, you-all.

Ω



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HAMNET NEWS

In the May issue of QSX a questionnaire appeared which included a question on Hamnet. Just to set the records straight, this question did not come from Hamnet, nor was Hamnet consulted on it. The question was: "Hamnet is intended to assist in the event of disaster. How can Hamnet play a meaningful role?"

In the Provinces, Hamnet is controlled and administered by the Hamnet Provincial Council, consisting of the Provincial Director, Deputy Provincial Director and Assistant Provincial Directors. It is the responsibility of the Provincial Council to make Hamnet play a meaningful role. It is for them to answer this question, certainly not the PE Branch membership.

It would, however, be interesting to hear how the 170 or so strong branch membership proposes that Hamnet should play a meaningful role when only seven of its members belong. A much better question would have been, "What are your reasons for not belonging to Hamnet?" This would help Hamnet to understand why members do not join when it is quite obvious (to Hamnet members anyway) that it is in their interest.

If Branch members do have an interest in answering this or any other question pertaining to Hamnet, then join and have your say.

We wish a warm welcome to the following who have joined Hamnet:

- * Johannes Jorritsma ZR2JJ, Port Elizabeth Branch.
- * Phil Kaufman Sorenson ZS2NP, East London Branch.
- * Ralph Hall ZS2IV, East London Branch.

Hamnet Simulated Emergency Contest.

This contest continues to be well supported and by all accounts was enjoyed. It was good to hear three stations from East London participating, namely Matt ZS2MW, Phil ZS2NP and Colin ZS2CR. In PE it was Ken ZS2OC, Peter ZS2PF and Al ZS2U. Des ZS2ABU and Bill ZS2ABZ were there to provide contacts.

73,

Al Akers.

Provincial Director, Hamnet East Cape.

GOLF SHIRTS!! — *If you are interested in obtaining a very fine business golf type shirt with the League badge on the pocket and ZS2PE callsign on the back, please contact Dick Schönborn at ☎ 56-3908 for details.*

MINUTES OF THE GENERAL MEETING OF THE S.A.R.L. HELD AT THE CIVIL DEFENCE CENTRE, MILL PARK, PORT ELIZABETH ON FRIDAY 19 MAY 1995

1. Welcome

The Chairman welcomed all present, particularly the visitors from the recent RAE class, namely Des Herselman & Peter Whittaker

2. Apologies – As per attendance register

3. Minutes of Previous Meeting – Acceptance : Proposer - ZS2MM Seconder : ZS2MC

4. Matters Arising – None

5. Financial Report –

The Branch is still in the black

HQ is to be advised that the additional Branch levy should not be included in the subscription reminders from HQ

6. New Business

6.1 **VW Rally** – Members were reminded of the rally on 21/22 July. Volunteers to contact Beavan ZS2RL

6.2 **Boot sale** – To be held outside the Civil Defence Centre at **14h00 on 17 June**

6.3 **Repeaters** – Maintenance of the 750 site is scheduled for Saturday, 27 May

6.4 **Wooden Spoon Award** – The meeting agreed that P.E. should sponsor this award which would go to the branch that exhibited the greatest interest in League affairs. The Chairman was asked to liaise with Council regarding the award.

7. Chairman Beavan ZS2RL, who is also PE's Deputy Electrical Engineer, gave the meeting an interesting and amusing account of PE's municipal **power distribution**.

[I wasn't there, but I am informed that this was the first time in Branch history that a speaker was booed and pelted with blown electrolytics – Ed.]

The meeting closed at 22h15.

Ω

FOR SALE * SWOP * FOR SALE

1. Kenwood speaker unit SP430. R 100.
 2. Kenwood ATU AT230. R 800.
 3. Electronic keyer, Katsumi EK150. R 250.
 4. Yaesu linear FL2000B. R 900.
- Phone Beavan ZS2RL at (041) 30-6968 after hours.

Ω MATCHING IMPEDANCES Ω

PHIL HOPPER, ZS2PP

One of the most daunting and puzzling tasks that face the home constructor seems to be that of matching the input and output impedances of the various modules. Unfortunately there is no easy way around this problem, but all is not lost and I offer the following as a rough guide for the enthusiast who is interested in developing his own circuits.

All home-brew projects should begin with the selection of a suitable transistor for the job, and only then should the circuit be designed around it. So, at this point it may be a good idea to highlight some of the more important transistor characteristics that will influence our decision when selecting a device for a particular task.

Firstly, is the device to be used for low power RF, high power RF, AF, switching etc? Having decided on the application, we can now turn to our transistor selection manual. The most important parameters to look at are:-

- the **Beta** or **H_{fc}** of a transistor is the *ratio of the collector to base current* and is expressed thus: $\beta = I_c / I_b$. Therefore, if a base current of 1 mA produces a collector current of 100 mA, the H_{fc} of the transistor would be 100.
- the **F_t** is the gain bandwidth of the device. Put simply, it means the upper-frequency limit of the transistor, which is the frequency at which the device gain falls to unity.
- A glance at the **I_c** column in your selection guide will tell you if the

transistor has the necessary current handling capacity for your particular requirement.

Once we have selected our transistor we will need to know how best to wire it into our circuit. Maximum transfer of signal will occur when the output impedance of one stage closely matches the input impedance of the following stage. It is neither necessary nor practical to match a circuit down to the last ohm. But if we can approximate the input impedance of the following stage we will be half way to success in no time at all.

It is not mandatory to know exactly how the impedances of the various configurations are arrived at but, for further reading on this subject, refer to the ARRL Handbook under Solid State Basics. The following is really all you need to know to design successful circuits.

Bipolar transistor circuits fall into one of three types, namely *common-base*, *common-emitter* and *common-collector*. Because of the different configuration for each type, the input and output impedances vary greatly.

FET transistors have three terminals which correspond in function to the Base.

Emitter and Collector of the **junction** transistor.

The following table will show you what to expect from the various circuit configurations.

BIPOLAR TRANSISTORS

Common-Base (see Fig. 1)

Input Impedance	... 30 to 50Ω
Output Impedance	... 300k to 500kΩ
Current Gain 1
Voltage Gain 500 to 1500
Power Gain 25dB typical

Common-Collector (see Fig. 2)

Input Impedance	... 20k to 500kΩ
Output Impedance	... 50 to 1000Ω
Current Gain 30dB typical
Voltage Gain 1
Power Gain 10 to 20dB

Common-Emitter (see Fig. 3)

Input Impedance	... 500to 1500Ω
Output Impedance	... 30k to 50kΩ
Current Gain 30dB typical
Voltage Gain 300 to 1000
Power Gain 30dB typical

FIELD EFFECT TRANSISTORS

Common-Source (see Fig. 4)

Input Impedance	... 1M to 15MΩ
Output Impedance	... 50k to 100kΩ
Voltage Gain 10 to 250
Power Gain 80dB typical

Common-Drain (see Fig. 5)

Input Impedance	... 1M to 15MΩ
Output Impedance	... 1k to 10kΩ
Voltage Gain 1
Power Gain 40 to 80dB

Armed with the above information, we can now take an educated guess at the input and output impedances of our QRP

circuits. If the impedances of two modules are very far removed, it may be wise to incorporate a matching transformer.

For example, supposing we have a module with an output Z of 200 Ω and we want to match this into a 50 Ω load. The impedance ratio ZR would be 4:1. Now, bearing in mind that the Turns Ratio TR is the square root of ZR, TR would be 2:1, and so a transformer having a primary of 8 turns and a secondary of 4 turns on a suitable core would do the trick.

The input and output Z of ICs can be obtained from the manufacturers' data sheets. Very often the sheets contain sample circuits that can be used as is or with minor modification.

Matching the Antenna

Another grey area in a Muddler's life is the matching of the linear amplifier into the antenna. How do we calculate the output impedance and, once again, how do we figure out how many turns to use in the output transformer?

Let us take the partial circuit diagram of Fig. 6 and use this in a practical example. Here we have a typical homebrew linear amplifier. Let us say that we have selected a pair of 2SC1969 transistors for the job. The supply voltage is 12 volts, and we would like 10 watts of RF output – i.e. 10 watts into 50 Ω at 12 volts.

When calculating the collector impedances of the two output transistors, most constructors seem to fall into the same trap. What we tend to forget is that, in a push-pull stage, only one transistor is conducting at any given moment.

[to Page 10

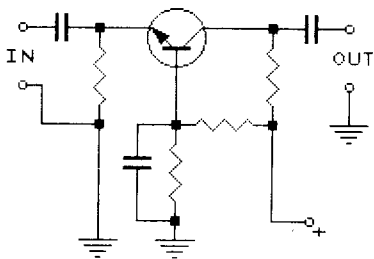


Fig.1
COMMON
BASE

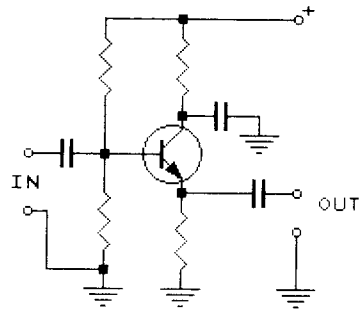


Fig.2
COMMON
COLLECTOR

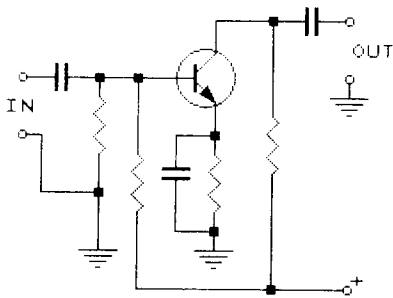


Fig.3
COMMON
EMITTER

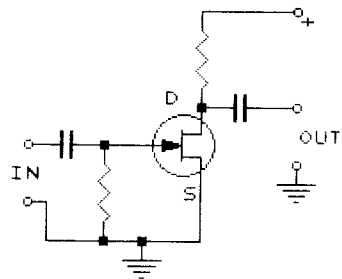


Fig.4
COMMON
SOURCE

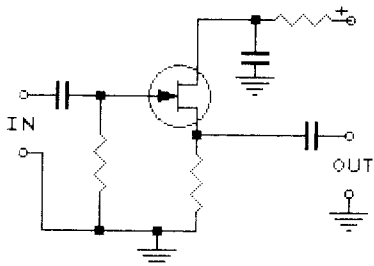


Fig.5
COMMON
DRAIN

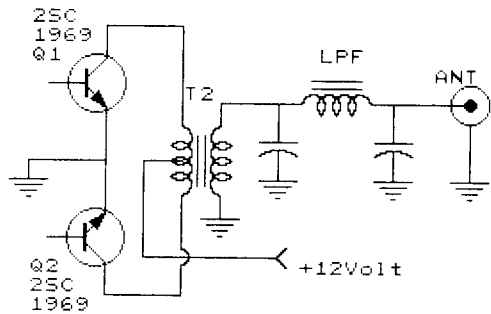


Fig.6
PUSH-PULL
FINAL

Matching Impedances

[from Page 8]

Therefore, the power output for one transistor = half total PO, or 5 watts, *not 10 watts!*

So, calculating the collector impedance for one transistor:-

$$Z = \text{Collector Volts squared} / (2 * \text{Power out})$$

$$\text{i.e. } (12 * 12) / (2 * 5) = 144 / 10 = 14.4 \Omega.$$

Now we require a transformer to match 14 Ω to 50 Ω :-

- Impedance Ratio = 14:50 = 1:3.57 or 1:4 nearest.

- Remember that Z = the *square* of the turns ratio.
- Therefore Turns Ratio = $\sqrt{1:4} = 1:2$
- Transformer will require 1 turn primary, 2 turns secondary.
- The primary will need to be tapped at one-half turn.
- The Collector to Collector Z = (14.4 * 2) or 28.8 Ω .

We can now go ahead and, using a suitable ferrite core, wind the transformer using the appropriate gauge copper wire. A 15 by 15 mm binocular core and 20# enamelled wire would be a good choice.

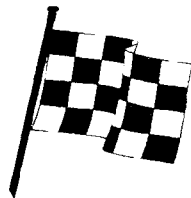
Happy Muddling!

Important! Important! Important! Important! Important **= VW RALLY 1995 =**

1. Date/time

Fri 21 July 1995, approx 13:00 – 19:00

Sat 22 July 08:00 – 16:00



2. Area

In the general area of Jeffries, Hankey, Uitenhage, Zuurberg, PE.

3. Comms

As we did last year, mobiles & rally control will be on VHF, with times being relayed on HF (probably 80m).

4. How to volunteer

Packet, telephone, letter, radio, telegram, eyeball - any mode will do. **But the best way is to complete the enclosed questionnaire and get it to me ASAP!**

***** **WE HAVE A REPUTATION TO UPHOLD!** *****

73 de **Beavan, ZS2RL**

WET van GAUTENG?

It's *that* time of the year again when the *Wet van Gauteng* rears its ugly head! Yes, subscriptions to the SARL fall due on 1 July, and all members are asked – smeeked – to cough up the wherewithal, even if you have to beg, borrow or steal it.

Only if all or most of the current members renew their membership will our new President and Council be able to “Turneround” the erstwhile downhill slide in our League and build it into a body that most South African hams will *want* to support.

If you paid attention to a recent HQ bulletin you would know that you may split your subs into two instalments, payable at the end of June and August at the latest respectively. Just send two post-dated cheques or issue two credit-card instructions.

If this is still difficult for you, please contact your worthy Treasurer, Clive ZS2RT, who may be able to work out a special package, perfectly personalized to pamper your specific pecuniary position and pathetically depleted pocket or paltry pension. (Don't tell Clive I said so) (and stop spitting all over your newsletter like that).

Branch Levy

You will recall that it was decided some months ago, rather than reduce the frequency of QSX, to ask *ordinary* Branch

members to increase their voluntary annual donation for QSX from R5 to R12 to cover the sharply rising cost of production. In the annual subscription reminder that Headquarters has sent to you, the levy will still appear as R5. However, *we ask you to ignore the levy and not include R5 with your subs* that

you send to HQ. Instead, we would prefer you to *send your R12 QSX contribution direct to our Branch Treasurer please.*

The time is also due for *Social members* of the

Branch to let us have their R30 subscriptions for the 1995/96 Branch year. Since this figure includes the cost of QSX, Social members are not asked to give an additional donation. We are, however, not above accepting any monies that may come our way!

Who's the Boss?

On the subject of reviving the League, I must cross swords with my friend Al ZS2U this month on the right of the Branch to seek members' comments on how Hamnet can play a meaningful role (see Hamnet News elsewhere in this issue). Al says: “It is the responsibility of the Provincial Council [of Hamnet] to make Hamnet play a meaningful role. It is for them to answer this question, certainly not the PE Branch membership”.

It is well to remember that Hamnet is a *League organ* and the League is owned by the *members*. The various organs of the League such as the DAC, YRAC, Hamnet etc. **and even Council** are

BOOT SALE BOOT SALE

A boot sale will be held on the open space in front of the Civil Defence Centre on Saturday, 1 July, commencing at 14:00.

Bring your unwanted junk and go home with somebody else's!

answerable to the members. Since members are represented in the first instance by their branches, it follows that branches have every right to discuss the activities of, and consider possible improvements in, any aspect of our League.

I suggest that it was the tendency of Council in recent years to decide what the SARL should do (not necessarily what the members *wanted*) that caused the serious downslide in the League that we now have to reverse. Is it perhaps a similar attitude in the Hamnet hierarchy that has produced the close ratio of chiefs to indians in our emergency organisation? I believe both Hamnet and the SARL should, as a matter of urgency, poll not only members *but especially non-members* to determine what is keeping them away. I think AI was poorly advised to challenge rather than welcome the Branch's effort.

80m Bulletin Relay

Due to popular demand (at least *three* members!) we have re-introduced the relaying of the Branch bulletin on 3640 kHz on Sundays. This will continue provided that we are assured of its necessity, i.e. ya gotta tell us it's thuh only way ya can hear thuh bulletin OK.

The 80m transmission will *not* be linked to the 40m/2m hookup, so those reporting on 80 will not be able to hear the other net. Which may be a blessing.

Morse Keys Wanted

Vic Olivier, ZS2SZ, is on the lookout for morse keys. These invaluable tools, which of course should grace and, in fact, take pride of place in every true ham's shack, are always required by newcomers

rising valiantly to the challenge of learning the grand and satisfying art of CW or by those equally motivated ZR's upgrading to exalted ZS status. If you have an unwanted key lying around in ignominy – and sis on you if you do! – please consider offering it to Vic. He won't let on that you've forgotten how to use it.

Are we Communicators?

Candidates have to wait (interminably, it always feels!) for their results to arrive in the post after writing the AGM. Changes are made in competition rules (e.g. the Field Day) but they are only announced a week or so before the big contest, and those interested have to ask for copies to be posted to them, unless they have access to fax service. Port Elizabeth calls for a special general meeting and the notice, with the agenda items, only reaches members two weeks before the date set down.

What's wrong with our own packet system? We suggested a while ago that the RAE results be circulated by packet (even if only the successful candidates' *numbers*, although school examination results are published in newspapers country-wide with names and all). Certainly the contest rules and SGM information could have been distributed rapidly by the same means. *We are* communicators – aren't we?

Callsigns with RAE Results?

How about your callsign being allocated simultaneously with the PMG's good news that you have passed the RAE? I am sure, especially now that the League is

running the exams, that a suitable procedure could be worked out for this.

For example, you could indicate on your entry form whether you want a ZR licence right away or you wish to wait until you've done your CW exam and go straight for a ZS ticket. If the former, you add the licence fee to your RAE examination fee plus the R25 that you already pay 'up front' for the PMG for your Operator's Certificate - which, like the callsign, you naturally won't get if you fail the exam.

On receipt of the good news, you could go on the air right away. The paper work can come later, in the PMG's own good time. The correspondence and double handling of files in the PMG's office would be greatly reduced.

Talking of the RAE

Due to my chugging between home and the hospital thrice daily while preparing QSX last month I overlooked a couple of things. Worst of all was my omission to wish all our RAE candidates well in the exam, for which I apologize. However, I

have no doubt that you did not need any luck from me, and we all look forward to hearing good news in the near future.

Please remember to let a Branch Committee member know, especially Gerhard Baum (☎ 30-5224) or Vic Olivier (30-2440) so that we can keep our records up to date and also announce the happy event!

160 Metres is Alive!

Remember to check out this band whenever you spin your dial. Having been disturbed earlier than usual the other morning I switched on at 06:30 and was surprised to hear some S9 signals. Using a random wire up at 4 Metres maximum height, I received good reports from Mossel Bay, Westonaria, Bloemfontein and Excelsior. Signals started to drop somewhat from about 06:40, at which time the group was closing down anyway.

This Afrikaans-speaking group appear to start up regularly at or perhaps even before 06:00 daily and I heard Peter ZS2PL also geselsing away with them on a second occasion. Ω

ANURRER ERROR

13.8V POWER SUPPLY

Vic, ZS2SZ, reports that he was asked to check over an obstinate power supply unit that was constructed from the article in the April issue of QSX and he found that pin 7 of the LM723 should be grounded in order for the unit to work correctly.

Sorry about that, but it's good to note that the articles in QSX are actually put to good use! For anyone else intending to construct the power supply, please remember to read the erratum/addendum on page 9 of the May issue of QSX too.

Anon Quote: Don't accept your dog's admiration as conclusive evidence that you are wonderful!

[I don't. Mine ran away long ago - Ed.]

Congratulations

on your birthdays:

June

- 25 Lionel Wrangmore ZR2AAJ
Robert Bosch ZR2ABK
Terence Flanagan ZS2ABB
- 26 Ben Taljaard ZR2CS
- 27 Robert Pokorny ZS2ABJ
- 28 John Gohl ZS2-268

July

- 1 Eddie Turnbridge ZR2EKT
- 3 Julie Scarr ZR2EY
- 4 Paddy Furlong ZS1GPF
- 5 Piet de Jongh ZS2NQ
- 7 Jim van Loggerenberg ZS2LR
Werner Ahlers ZS2WA
- 9 Lambert le Doux ZS2LL
- 11 Isaac Greeff ZR2Z
Hettie Taylor XYL of Gerald
ZS2AAX
- 16 Sel Staples ZS6SS
- 17 Elsa Schilder XYL of Ben ZR2ABE
- 19 Arthur Baynes ZR2ARB
Bill Browne ZS2BY
- 20 Vic Olivier ZS2SZ
John Cuthbert ZR2ABX
- 22 Beavan Gwilt ZS2RL

on your anniversaries:

June

- 1 Hettie & Royden Thompson ZR2ABF
- 4 Marge & Jim van Loggerenberg
ZS2LR
- 8 Heather & Neil Holmes ZS2A1
- 14 Heather & Jimmy Hoole ZS2ABM
- 16 Peggy & Viv Moore ZS2VM
- 19 Elsa & Ben Schilder ZR2ABE
- 26 Mandy & John Masters ZS2AAN

July

- 4 Marge ZS2OB & Brian Weller
ZS2AB
- 10 Ruth & Walter Bodmer ZR1WB
- 12 Julia & William Atteridge ZS2V

on your new callsigns: Lawrence Tiltman ZR2BBD and Bert van der Poel ZR2USA. Now for the CW?

on your engagement: Keith Laaks ZS6TW and Ronata Bezuidenhout. Like Keith, Ronata is an Electronics Engineer. She wrote the RAF in May and plans to do her CW in the near future.

on an achievement of note: Poppie Oosthuizen ZS1AFZ, who has received the French DTC Diploma in recognition of her **5 000 contacts on CW**. Poppie has actually had 7 000 CW QSOs to date and is aiming for the 10 000 diploma and then the ultimate 20 000 job. Keep it up, Poppie.

□□□

Welcome to new member Mark Venter, ZR1MLV of Mossel Bay. **new arrivals** in the Southern/Eastern Cape Danie Vosloo ZS4ABC ex Koppies now in Jeffrey's Bay, and Isak van Aarde ZS2I ex ZS4I of Bethlehem, now of Tergniet near Mossel Bay, and finally **our old friend** Ron ZSIRON who is back in PE for a holiday – welcome, Ron and Helen! It's always nice to have you here.

Happy Holiday to Julian ZS2AAV who has recovered from his heart attack and is painting the UK red for a couple of months.

Ω

Port Elizabeth Branch Committee

Chairman; Rallies	Beavan Gwilt ZS2RL	30-6968
Secretary	Kevin Karp ZR2KLM	30-0792
Vice Chairman; Social	Owen Thomas ZS2AZ	38-4134
assisting with refreshments at meetings	Bill Hodges ZS2ABZ	51-2580
Treasurer; Assets Control	Clive Fife ZS2RT	32-3203
assisting with Assets Control	Lynne Crothall ZS2MM	35-4671
Awards; Library	Peter Flynn ZS2PF	46-4096
Repeaters; Packet	Wolf Gerstle ZS2WG	30-1510
Special Events	Dick Schönborn ZS2RS	56-3908
QSO Manager	Vic Olivier ZS2SZ	30-2440
assisting as QSO Editor/layout	Garth Laaks ZS2HB	38-1101
Technical Classes	Gerhard Baum ZS2UM	30-5224

Branch VHF & Other Services

REPEATERS

Town VHF	145,050/650	Kareedouw	145,125/725
Town UHF	431,050/438,650	Lady's Slipper	145,100/700
Grahamstown	145,150/750	Uitenhage	145,075/675
Cradock	145,050/650	Cockscomb	145,000/600

OTHER SERVICES

Packet Bulletin Board (ZSØUTE)	144,675
Digipeater (Grahamstown - ZSØGHT)	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

Branch bulletins are transmitted on Sundays immediately after the Headquarters English transmission, i.e. at about 08:45, on 7098 kHz (and 3640 when necessary) as well as on the 2 metre linked repeater system giving coastwise coverage from East London to Humansdorp and points beyond via 145,750 and 145,700 MHz.

Date	Prepare and Read on 145,700
11 Jun	ZS2RS
18	ZS2RT
25	ZS2AZ
2 July	ZS2RL
9	ZS2UM
16	ZR2KLM

DIARY DATES

JUNE

13 QRP Proj Meeting
23 Branch MEETING
29 Technichat

JULY

1 BOOT SALE

★ We Like Being Your Branch ★