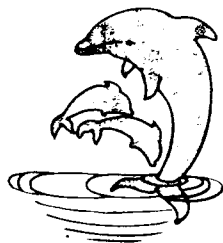




# Q S X P E



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

P.O. BOX 10402  
LINTON GRANGE  
6015

04 / 90

P O R T      E L I Z A B E T H      B R A N C H  
COMMITTEE

CHAIRMAN	Marge Weller	ZS2OB	30-4597
VICE CHAIRMAN	Brian Weller	ZS2AB	30-3498
SECRETARY (Minuting)	Dick Schonborn	ZS2RS	55-2244
SECRETARY (Corres)	Colin Ashwell	ZS2AO	31-2471
TREASURER	Colin Robertson	ZS2CTR	30-0570
RALLIES/SOCIAL	Beavan Gwilt	ZS2RL	30-6968
SPECIAL EVENTS	Dick Schonborn	ZS2RS	55-2244
AWARDS	Bill Hodges	ZR2AAN	51-2580
HAMNET	Al Akers	ZS2U	30-2983
EDITOR - QSX-PE	Marge Weller	ZS2OB	30-4597
REPEATER WORKING			
GROUP - CHAIRMAN	Trevor Scarr	ZS2AE	32-1746
LIBRARIAN	Colin Ashwell	ZS2AO	31-2471
PACKET WORKING	Lionel Coombe-		
GROUP CO-ORDINATOR	Davis	ZS2DD	32-1770

BULLETIN ROSTER

DATE	COMPILER	40m NET	2m NET
15 April	Bill ZR2AAN	ZS2RL	ZR2AAN
22 April	Al ZS2U	ZS2U	ZS2AO
29 April	Beavan ZS2RL	ZS2RL	ZS2CTR
6 May	Marge ZS2OB	ZS2OB	ZR2AAN

SUNDAY BULLETIN INFORMATION

Primary Frequencies for bulletins at approximately 08.40a.m.  
H.F.7098 kHz in 40 metre band. VHF 145,100 MHz - Ladies Slipper  
Repeater

BRANCH V.H.F. SERVICES PROVIDED

Town Repeater (P.E. Central)	145,050 - 145,650 MHz
Grahamstown Repeater	145,150 / 145,750 MHz
Ladys Slipper Repeater	145,100 / 145,700 MHz
6 meter link with above	51,400Mhz (simplex)
Cockscomb Repeater	145,000 / 145,600 MHz
Kareedown Repeater	145,075 / 145,675 MHz
University Repeater	145,175 / 145,775 MHz
6 meter beacon (ZS2SIX CW Id)	50,005 MHz
2 meter beacon (ZS2PE CW Id)	144,910 MHz

\*\*\*\*\* WE LIKE BEING YOUR BRANCH \*\*\*\*\*

## NOTICE OF MEETING.

Members are reminded that the next general meeting of the Branch will be held on Friday 20th April, 1990, at St. Martins Church, Kabega Park at 8.15p.m.

### SEASONS GREETINGS

We wish our members and their families a very Happy Easter and a Good Yomtov.

### PERSONAL NEWS

Lionel ZS2DD has now become a member of the Permanent Loafers Club and no doubt, will now have time to work in his shack doing all the things he didn't have time for before.

Phil Hopper ZS2PP will be a shining TV star soon appearing on the programme Antenna in connection with a special form of transport for disabled people which we believe he and his son have developed. Watch and see what its all about.

Welcome to W.H. Bodmer of Sedgfield - one of our new members. We hope you have a long and yappy association with the Branch and the League.

Congratulations to Cliff Kwong See ZS2CKS who was awarded a trophy for winning the First year CW section of the League Contest.

23 members and wives spent a very enjoyable evening at Alfies Restaurant on 31st March. The company and the food were excellent and it is a pity more people couldn't be there.

We are pleased to hear that Basil Gibson ZS2PG who is presently in Cape Town is making good progress and we wish you a complete and speedy recovery, Basil.

### FOR SALE

One copy of Radio Amateurs World Atlas for R20. First come, first served. Phone Al Akers ZS2U.

### 2M REPEATER GUIDE AND HAMNET BOOKLET

Headquarters have produced a booklet containing all the details of 2m repeaters throughout the country. This is available for R5. It will also be printed in Braille.

Contact Headquarters direct for your copy.

The Hamnet information booklet will be available soon.

MINUTES OF GENERAL MEETING OF THE PORT ELIZABETH BRANCH OF THE SOUTH AFRICAN RADIO LEAGUE HELD AT ST. MARTINS CHURCH, KABEGA PARK ON FRIDAY 23RD MARCH, 1990.

PRESENT: 28 members

APOLOGIES: as per register.

The Chairman extended a welcome to members.

MINUTES: The Minutes of the meeting held 23rd February 1990 having been published and circulated in QSX-PE were taken as read, proposed by Colin ZS2CTR and seconded by Viv ZS2VM.

FINANCE: Colin ZS2CTR the treasurer reported that the state of the finances was healthy. A copy of the statement had been handed to the Chairman.

CORRES: Branch Newsletters.

Letter from President Reno ZS6OF

Letter from ZS2V

Logs for Hamnet Simulated Emergency Contest.

Article for QSX-PE from Jim ZS2LR

ARISING: (1) Marge read the letter from the President thanking her for her able representation of P.E. and East London Branches at the A.G.M.

(2) Al reported on the Hamnet Contest. There had been about 17 stations operating portable and some fixed stations had given points.

(3) Van ZS2Y asked about his letter re the local bulletin relay on Ladies Slipper rather than Town Repeater. There had been more activity afterwards when the relay had been on Ladies Slipper while the Town Repeater was being repaired. On a show of hands it was decided that the relay be on Ladies Slipper henceforth.

GENERAL: (1) The Chairman said that there was a problem as far as the travelling supper was concerned, as one of the homes offered for the main course was now no longer available. The alternative was for us to go to Alfies for dinner. The cost would be R15 plus GST per head and this was accepted. It appeared that there would be approximately 24 attending. The time set was 7.30 for 8p.m.

(2) 21st April was being celebrated as Marconi Day and it was decided to hold a similar display as last year and Marge said she would arrange for the same venue and would circulate schools with publicity prior to the event. Hans ZS6AKV asked us to contact him when we would be operating as there would be a link-up with Radio RSA several times during the day from the main station at Bloemfontein. Raphy ZS2SP said that there should be a talk on Marconi at a set time during the day which might attract more people to attend. A talk was supposed to arrive last year, but if nothing arrived this year, Raphy said that he had a book about Marconi which could be used to get information.

(3) Marge showed a 2m repeater guide which had been produced by Headquarters. It was full of information and would be sold for R5. Members were asked to place orders.

(4) The certificate won for the Field Day first prize was shown. Apparently the trophy could not be found.

(5) The subs for 1991/1992 would be R66 for ordinary members, with 15% increases across the board. For this year the fees will be as shown elsewhere in this issue.

(6) Raphy said that he had mentioned the matter before, but he still felt that a more central venue for the meetings would be preferable. He knew that many members were attending the meetings, but wondered how many more would come if there was a more central venue. Marge replied that she had tried many times to get a venue in Newton Park, Cotswold and other central areas, but they were not available. Al said that we were very fortunate to have this venue as he had also been involved as Chairman of Algoa Branch in trying to get venues for meetings. Van ZS2Y said that 85% of the local members lived in the western suburbs. After a show of hands, it was decided to keep this venue for the time being.

(7) Colin ZS2CTR said that an American friend of his had issues of Ham Radio and QST going back for many years and said that we could have them for \$50 postage if we were interested. Colin said he would get more information.

(8) Vic ZS2SZ thanked Brian ZS2AB for organising the special event callsign so quickly for the celebration of the S.A.R. privatisation. He also would like to revive DF hunts. Bud ZS2CA said that Pretoria Branch did hunts simultaneously on 2m and 160m and these were good fun. Vic said that he and Athol ZS2CM were prepared to organise them. This was felt to be a good idea.

(9) Beavan ZS2RL proposed a vote of thanks to Trevor ZS2AE for repairing and re-installing the Town Repeater.

(10)The 6m beacon transmitter had been off the air for a few days but was now functioning again.

(11)The updated constitution would be available soon The next A.G.M. would again be held in the Transvaal. Marge asked whether we should offer the following one for P.E. It was decided to wait for further developments.

(12)Owen ex ZS2HZ is now GONCE.

(13)Garth and Marge then gave a report back of the events of the A.G.M. and how the voting went on the various motions.

The meeting closed at 22.10 hours.

sgd: M.T. Weller ZS2OB  
Chairman

sgd: B.A. Weller ZS2AB  
Acting Secretary

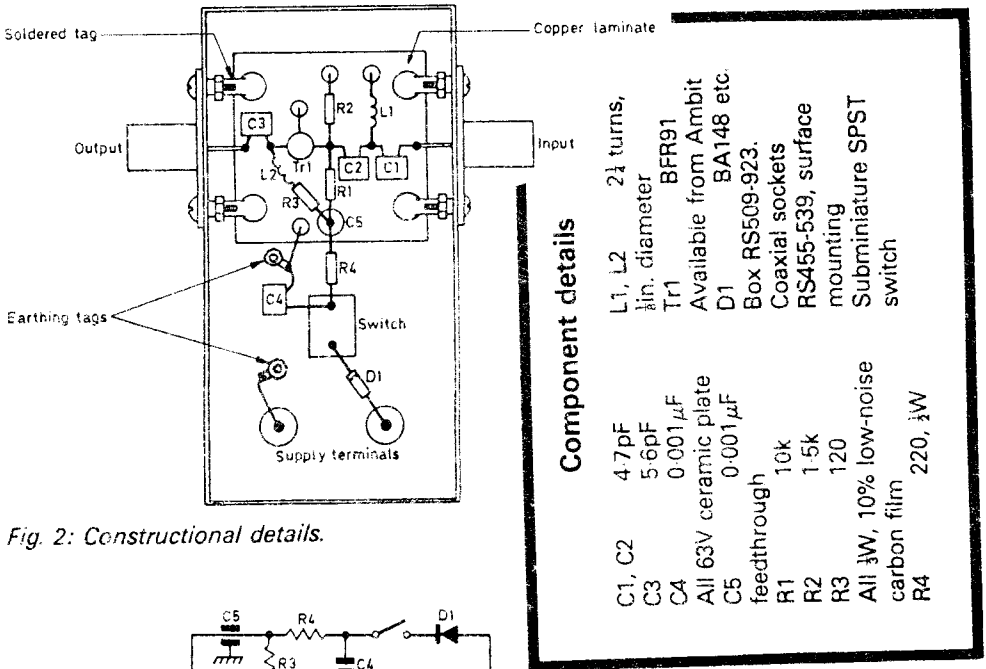


Fig. 2: Constructional details.

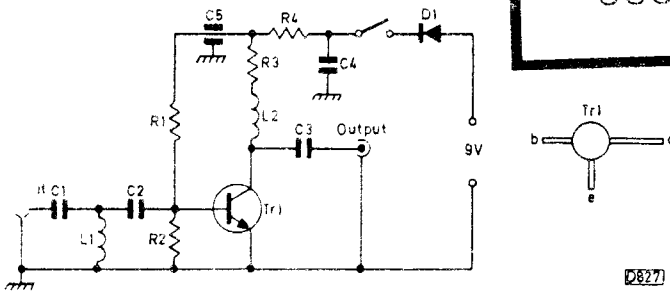


Fig. 1: Circuit diagram.

## WIDEBAND UHF PREAMPLIFIER

By Roger Bunney - Television April 1984.

For minimal displayed noise (snow) on the screen, a pre-amplifier for use with weak signals should have the lowest possible noise figure, lower than that of the tuner's first r.f. amplifier stage. The ubiquitous OM 335 hybrid pre-amplifier is not good enough in this respect: despite its high gain, typically 27 dB, the noise figure of 6 dB is somewhat above that of a u.h.f. tuner's first stage. It's a sad fact that many enthusiasts go for an amplifier with a high gain figure without considering the noise level: a 20dB gain with 5dB noise will produce degraded performance compared to a gain of 10dB with a 2dB noise figure.

The unit described in the present article was constructed for indoor use as a first-stage amplifier. It has linear operation across the u.h.f. bands, freedom from overload or instability a lowish gain (typically 11.5dB) and a low noise figure (typically 2db). If the amplifier is used following a mast-head amplifier there will be little improvement in weak signal performance since the system noise figure will have been set up at the mast. It's vital that the first stage of electronic amplification contributes as little noise as possible.

Fig 1 shows the circuit which uses a BFR91 low-noise wideband amplifier transistor capable of operating at over 1 GHz. With a collector current of 3mA, the noise figure at 500MHz is 1.8dB. Between 2-5mA the noise figure is under 2dB. The circuit is arranged so that Tr1 passes 4.5mA at 9V. Tr1's collector load consists of the u.h.f. choke L2 and the series damping resistor R3, the ratio of the turns to the value of R3 giving a slight lift towards the top of Band V. The value of R3 could be reduced to say 68 or 82 Ohms to flatten the response. Using an extra turn for L2 will move the peak in the response to Group A or B. The winding is made from one of R3's leadout wires. D1 provides reverse polarity protection.

CONSTRUCTION The smallest RS diecast box (35mm wide) was used with the amplifier built across it on a small piece of copper-clad laminate held by the coaxial socket mounting bolts via 6BA tags soldered to the copper side. Use short lead lengths following normal u.h.f. practice. Since a 9V battery cannot be accommodated within the box, 2 mm sockets are fitted for the supply.

PERFORMANCE I've found the design to be repeatable - the amplifier was originally conceived as part of a forthcoming DXTV project. No alignment is required and the amplifier should work on completion.

For DX reception I use the ETO21 series tuner, whose MOSFET amplifier has a very low noise performance. Because of this, many preamplifiers provide no improvement. With the present design, however, recognisable pictures are obtained with inputs as low as simply line syncs (P 1/2 to P 1/2 - 2 on the ATV scale). There's complete stability across the spectrum with or without input termination. At 9V the noise figure is typically 2 dB and the gain is as follows: 11.5dB at 470MHz; 11.5dB at 500MHz; 11.2dB at 600MHz; 11.6dB at 700MHz; 13.8dB at 800MHz; 13dB at 860MHz. The unit will work happily at up to 12V, but don't exceed this voltage.

Use of a tuned collector circuit i.e. two turns tuned with a 2-10pF trimmer and with R3 deleted (and the value of R4 increased to compensate) would increase the gain and reduce the bandwidth. For increased wideband gain, C3 could be taken to the base of a second BFR91 transistor. The amplifier is particularly useful where a nearby high powered transmitter makes the use of a mast-head amplifier impractical.



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H A M N E T      N E W S

I have just received the long-awaited letter from the National Co-Ordinator ratifying my election to the post of Regional Co-Ordinator, Hamnet East Cape. I am pleased to have the following members on the Committee to support me:

Bud Voortman	ZS2CA	Secretary
Ken Victor	ZS2OC	
Stoffel Carr	ZS2C	
Jack Moolman	ZS2KU	

A recent ruling of Council is that only members of the League may belong to Hamnet, though assistance from non league members (and therefore non Hamnet members) will always be welcome. Your Committee was strongly opposed to this and put forward a motion to the 1990 A.G.M. to this effect. Unfortunately the motion was lost, by a large majority too. It is the Committee's hope that East Cape Hamnet members who do not belong to the League will now join, or will at least still be prepared to assist, especially in an emergency.

HAMNET SIMULATED EMERGENCY CONTEST.

It was heartening to have at least seventeen portable stations participating in the contest and at least eighteen fixed stations who gave points to these contestants. This was despite the rain experienced by at least some of the division 5 and 6 stations. As would be expected, most of the participants were from Division 6, followed by Divisions 2, 5, 4 and 1. From all appearances, a good time was had by all. Quite a number of stations were running under ten watts output.

Al Akers, Regional Co-Ordinator, Hamnet East Cape.

HOW'S THIS FOR A LAUGH?!

ATTENTION: Mr. Paul Johnson.      Ref No. ....

FAX MESSAGE

Dear Mr. Johnson,

Re Your required dry joint.

Pls kindly advise the size and q'ty to us, then we can send them to you soon. As there are many sizes of dry joint on board.

Look forward to hearing from you soon. Tks.

Best regards, Melody Twu.

## REPEATERS by ZS2Y

The P.E. Branch has six repeaters. Big deal, most of the time they don't work anyway, and besides repeaters are easy. All you need is a receiver and a transmitter, a Carrier Operated Relay to key the TX, two Antennae and you're A for away.

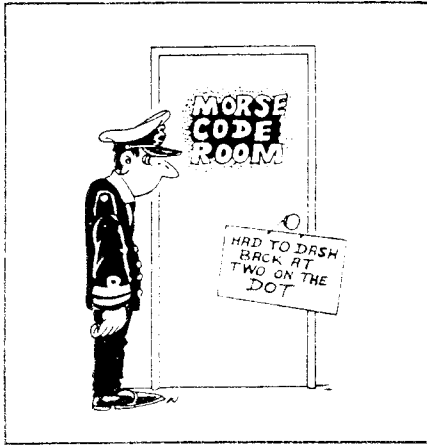
Sure perhaps if you're operating on the commercial 2M frequencies which have a channel spacing of 7 MHz, you may just get away with such a set up. Or at worst you may have to use a small diplexer which means you do away with one antenna. However, if you bring this rig down to the ham band with its 600 kHz spacing, it becomes a completely different ball game. Your repeater won't even operate coupled into two dummy loads let alone antennae. Horrible things like sideband noise, spurious radiations etc. will give massive desensitisation and your repeater will be unusable.

You now separate the TX and RX and build them into RF tight boxes. Add bypassing, filtering and some 30 working hours later you have a repeater that MAY work on two antennae. Remember for this work the service shops will charge around R2000 at todays rates. Most likely you will still be faced with the necessity of putting in cavity filters, or if the repeater is on a congested site, a crystal filter - another R2000 plus.

The commercials take the easy way and use a sophisticated diplexer, R16000, so with antenna this repeater will set them back R30000 at least, plus another 3 grunts or so for the installation on a mountain top, double that if a helicopter has to be used. Annual service on such a repeater, at least R1000 and you, dear member, get all this for R57 a year. And remember you also have access to a countrywide system of repeaters

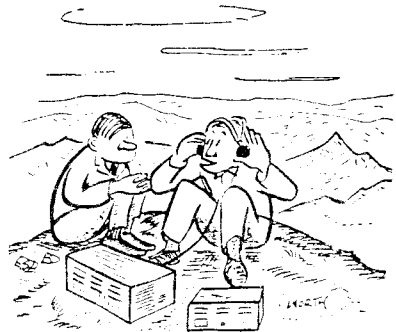
Commercial users are denied the privilege of narrow channel spacing, it being reserved for very essential services. In the East Cape, only the SAP and Provincial traffic police have such a system. Province paid several million for their system - I know, I installed it.

So next time your favourite repeater goes haywire, just switch to one of our other repeaters. The Ladies Slipper covers 90% of town. My saltmine has a repeater up there, and apart from midtown and the bypass, we have 100% coverage. Besides our communications are not all that urgent, anyway.



A photographer, posing a father for a graduation picture with his college son, asked, "Why not put your hand on your son's shoulder to make the picture look a bit more natural?"

"Well, if you really want it to look natural," said the parent, "why not have him put his hand in my pocket?"



"He says we're making \$7 on pecks..."

Sometimes it is hard to tell whether you are as busy as you think or just confused.

Mothers are wonderful people. They can get up in the morning before they smell the coffee perking.

School bus driver: a man who thought he liked children.

Boss to secretary: "I've got to call my wife. Send my daughter a telegram to get off the telephone."

