



Q S X P E

ZS2PE

FREQUENCIES:

Bulletin	3640 Khz
	7107 Khz
National Call	145,5 Mhz
P.E. Repeater	145,05/65
Grahamstown	145,20/80
Lady's Slipper	145,10/70



*Port Elizabeth Branch of the
South African Radio League*

P.O.Box 462, Port Elizabeth. 6000.

14 AUG 1978

MINUTES OF THE MONTHLY GENERAL MEETING OF THE PORT ELIZABETH
BRANCH OF THE S.A.R.L. HELD ON 21st JULY 1978 at 20h00.

- PRESENT: A total of 26 members and visitors. The Chairman extended a special welcome to Bob ZS2BJ, Bill ZS2EK and his XYL; Marge ZS2OB, Gus ZS2MC and Phil Obermeyer.
- APOLOGIES: ZS2EA, ZS2AO, R. Jenkins.
- MINUTES: These had been published in QSX. Their adoption was proposed by ZS2KX and seconded by ZS2DD.
- ARISING: A comment was heard about a spelling error in the last set of minutes.
- FINANCE: A statement of income and expenditure was read to the meeting. The Chairman thanked the Secretary for his efforts with the Branch finances during the Treasurers period of confinement to hospital.
- CORRESP: Nil.
- GENERAL:
- (1) The Chairman said that he had been to visit ZS2CY before the meeting and that Frank was progressing well. It was hoped that his leg would be taken out of suspension at the end of the month. Frank had been receiving a lot of visitors.
 - (2) It appears that all PG exam results are now known. Of 19 candidates 9 have passed. Congratulations were extended to the successful persons. It was noted that several of these were not taking out a ZR licence but going to press on for a full ZS.
 - (3) CW classes. This subject has been mentioned before. ZS2AO is willing to start this off but he will be touring overseas next month so others are required to assist. ZS2DD expressed willingness to conduct on-the-air practice. When it has been decided which bands will be used, times and dates etc., the info will be put over in QSX and bulletins. It was hoped that ten metre transmissions would reach those in Uitenhage who want to participate so that the repeaters would not be tied up during sessions.
 - (4) A DF hunt will be held on Sunday next. ZS2BK is to be the fox.
 - (5) The Chairman had thanked Alan ZS1AC in the last QSX for his regular contributions. Another two envelopes of articles have been received from him.
 - (6) The Met. office guest speaker has been repeatedly "unavailable", so we have resorted to films again for this evenings entertainment.
 - (7) The Lady's Slipper repeater is working well again.
 - (8) ZS2BK has received a request from the Voortrekkers to set up a station for the CQ Hou Koers. This will be held on Aug 12, from 0800 to 1600 hrs. The station will possibly be setup at a school in the Western Suburbs. A request was made for helpers. ZS2BS was willing to assist, as was ZS2RS.
 - (9) ZS2TY asked about the proposed Kareedouw repeater. The Chairman said that the whole project seemed to be bogged down at present. The Dept. of Forestry will allow use of the land, but the Post Office want money for the use of the accessroad. Mains power may present a problem, and this is essential to power the UHF link unit. Possibly an arrangement may be made with Escom.
 - (10) A new low power repeater is crystallised up and ready to be tested. This will be erected on a site on the Cockscomb range. Control circuitry is to be designed. Hopefully the unit can be placed on test during the coming week. Current drain is very low. The promised alternator for the windcharger is due to arrive shortly. The entire system has to be made as reliable as possible due to very difficult terrain.

There being no further business, the meeting was declared closed at 20h48.

sgd.
R.W.Schonborn ZS2RS
CHAIRMAN

sgd.
B.A.Weller ZS2AB.
SECRETARY.

FROM THE CHAIR.

For some months now I have avoided writing under this heading, but in view of the forthcoming A.G.M. I feel it is time to once again put pen to paper or key to ribbon. In order to avoid a reoccurrence of a few raised eyebrows when proxy votes made an appearance, a form for just this purpose has been included in this issue. The object thereof is of course to enable especially our country members to exercise their voting rights. It is hoped that local members will make the effort to put in a personal appearance. Kindly ensure that these forms are returned as promptly as possible. All proxy votes must be lodged with the Secretary at least a half hour before the meeting starts. Don't waste your vote. Try to ascertain whether your nominee is available for election. If you are unsure, rather appoint someone well acquainted with branch matter to vote on your behalf.

Dick. ZS2RS.

HAVE YOU PAID YOUR SUBS YET ???

Please remember that you are not entitled to vote if your subs are not up to date. Payments in instalments are acceptable.

Andre ZS2BK leaves on Friday 11 August on a 3 month tour of duty with his salt mine to U.K. and France. We wish him an enjoyable trip. He has made arrangements to have QSO sent to him over there.

The long awaited ZR licences have not yet put in an appearance. Rather frustrating for the six or seven local eagerly awaiting them.

Ken Biggs and XYL Lynn are returning to the U.K. on 5th September. Who knows, we may yet see them back in ZS.

Brian ZS2AB has been enjoying himself on top band, having almost daily contacts with East London and last Monday with ZS6AM and ZS1AU. Brian, the same, and Roger Jenkins are putting the finishing touches to two VDU's and these will be smoke tested soon. None too soon for Bert ZS2EA.

The new WRR repeater on 145.225/825 should begin on the air tests within the week. Initially at the QTH of Dick ZS2RS.

Congratulation to Glen and Maunette on the birth of daughter Angela recently.

FOR SALE.

SWAN 350 transceiver. R350. (Rl. per swan) Brian ZS2GF.
He is also interested in near offers. The nearer the better.

/ /

For the benefit of members not too au fait with branch matters, here is a list of the present committee.

Chairman. Dick ZS2RS.

Vice Chairman. Lionel ZS2DD.

Secretary. Brian. ZS2AB.

Treasurer. Frank ZS2CY

Louie. ZS2KT. Selwyn. ZR2BE. Ken. ZS2061.

Ken is not available for re-election since he is leaving the country next month.

Home-Canned Dummy

—cheap half-gallon load

Michael J. Di Julio WB2BWJ
97 Woodside Rd.
Maplewood NJ 07040

Steven B. Waldman WA2JZR
5 Victoria Court
Morganville NJ 07751

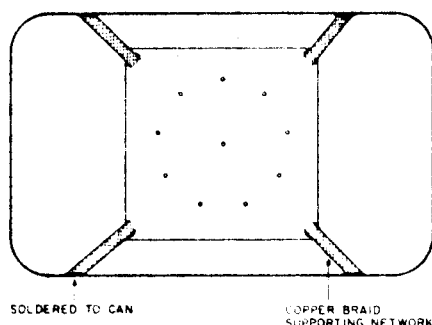


Fig. 1. Bottom view of the can.

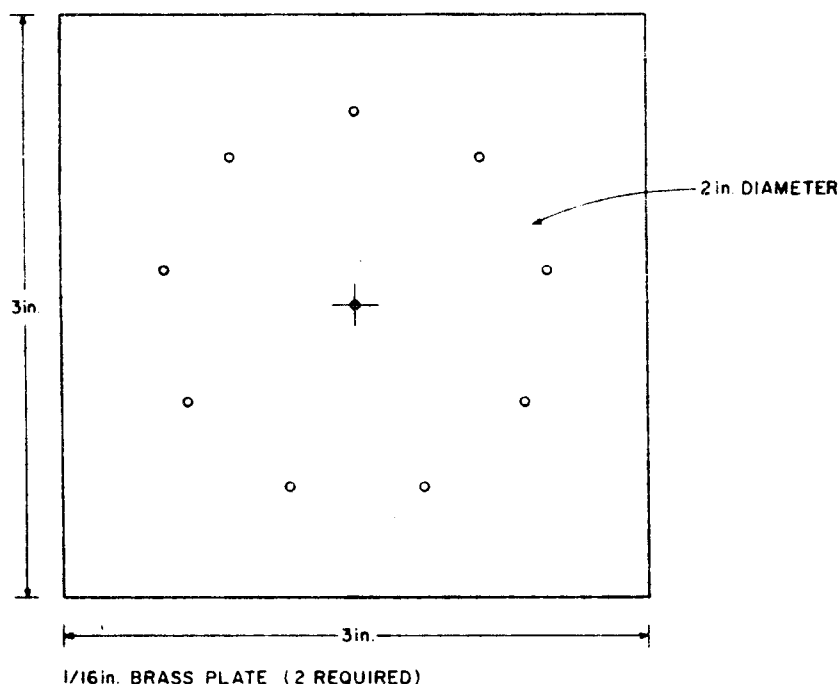


Fig. 2.

In today's times of high prices, it is nice to know that home brew dummy loads are still within the price range of the poorest amateur. Each of our half-gallon gallons was constructed for less than \$3.00 using readily available materials.

One-gallon paint thinner cans were prepared for the project by cutting off their bottoms with an ordinary can opener. This was followed by a thorough washing and drying procedure to remove

any trace of the flammable contents. Next, twenty 470-Ohm, two-Watt 10% resistors (ten for each load) were sorted between the two of us so that we had equal numbers of high and low values. This gave us parallel combinations that were very close to 50 Ohms. Each group of ten was then soldered between two 3" x 3" pieces of 1/16" brass plate pre-drilled to accept nine resistors in a 2"-diameter circle with the tenth one in the middle.

A hole was then punched on top of the can to accept a suitable connector. In our case, a flange-mount SO-239 was the choice. The flange of the connector was soldered to the can to make an oil-tight connection. The rear of the connector was also epoxied over to prevent oil seepage through the center conductor.

The resistor network was then mounted in the can, supported by a 2" length of heavy-gauge wire soldered from the center pin of the connector to one side of the resistor assembly. Four pieces of copper braid were soldered to the bottom of the resistor network at each corner and then soldered to the can for support and to provide a good ground plane.

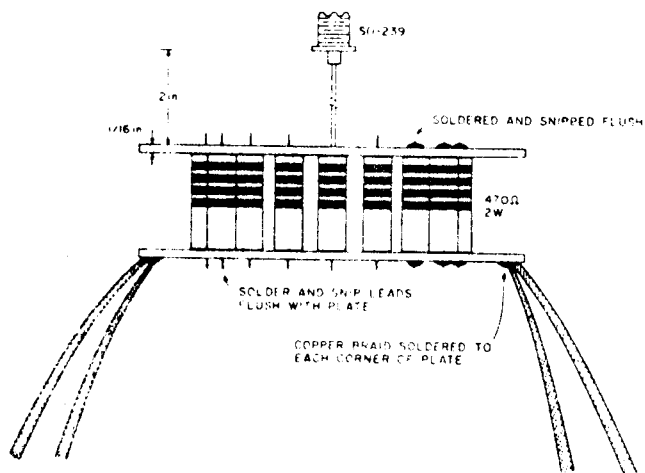


Fig. 3. Resistor network.

The can was sealed by cutting a piece of 1/16" copperclad PC board approximately 1/4" larger than the base and soldering this to the bottom of the can.

Testing the load on a Hewlett-Packard network analyzer model 8407A showed that the loads were purely resistive at 50 Ohms up to 32 MHz. The can was filled with a gallon of 30- or

40-weight motor oil (the cheapest brand available). The dummy load was designed for transmitters in the 200-Watt class, but it is able to take at least twice that power. It is advisable to loosen or take off the cap of the dummy load when in use to vent any expanding oil or fumes that may come off when the load is used at high power. ■



CONCLUSION OF LAST MONTHS ARTICLE

One Last Note

If your repeater doesn't give omnidirectional coverage, or if you'd rather have a definite preplanned radiation pattern, you can get considerably more gain than the 5.8 dB already promised by merely spacing the antenna a prescribed number of quarter wavelengths from the tower. Of course this means that your antenna will have to be side-mounted rather than top-mounted. If you space the antenna one quarter-wave from the tower, you'll get a major lobe in the same direction as the antenna is from the tower mass, as shown in Fig. 6A. Each additional quarter-wave essentially adds a lobe that exceeds the 5.8 dB omnidirectional reference point.

Playing around with antenna-to-tower spacing can help you spend a jolly afternoon at your repeater site — which can be great fun when compared with painting the fence or fixing the wife's vacuum cleaner. So grab yourself a hunk of coax or two and get started on the antenna. Then take a good look at a map of your area and see if you can't improve your repeater's efficiency by some selective mounting techniques.

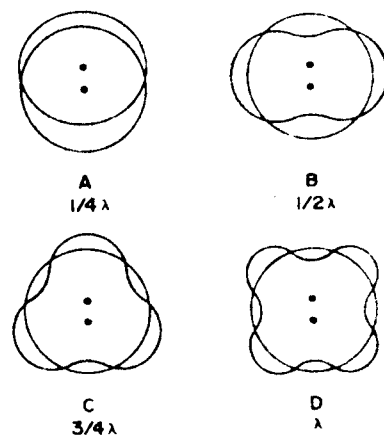


Fig. 6. By spacing the antenna the proper number of quarter wavelengths, some interesting radiation patterns can be obtained. In the patterns shown, the circles represent the 5.8 dB omnidirectional gain achieved by top-mounting. The asymmetrical overlays represent the patterns obtained by side-mounting. Note that even though signal loss occurs in some directions, significant gain improvement is realized in other areas.

ANNUAL GENERAL MEETING.

Notice is hereby given of the Annual General Meeting of the Port Elizabeth branch of the South African Radio League to be held on Friday 15th September 1978 at 8pm at the Y.M.C.A. Havelock street, Port Elizabeth.

AGENDA.

Minutes of previous A.G.M.
Matters Arising.
Chairmans Report.
Financial Report.
Election of Office Bearers.
General.

Signed. B.A.Weller. ZS2AB Hon. Secretary.

SOUTH AFRICAN RADIO LEAGUE
PORT ELIZABETH BRANCH
ANNUAL GENERAL MEETING 1978.

FORM OF PROXY.

NAME.....

CALL SIGN.....

I HEREBY NOMINATE,

FOR THE POSITION OF..

1.

.....

2.

.....

3.

.....

More nominations may be written in if you wish.

I hereby appoint to vote on my behalf
as per above nominations, for the election of office bearers to serve on the
Committee for the year 1978/1979.

Signed. _ _ _ _ _