

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.

16 OCT 1978

MINUTES OF THE GENERAL MEETING OF THE PORT ELIZABETH BRANCH
OF THE S.A.R.L. HELD ON 18th AUGUST 1978, at 20h00.

PRESENT: A total of 21 members and visitors. The Chairman welcomed ZS2JR, ZS2FR, ZS2L, ZR2BP and Marilyn KYL of ZR2BS.

APOLOGIES: ZS2KX, ZS2LO, ZS2GT, ZS2U, ZS2AE, ZS2AP, ZR2BF, ZS2CY, ZS2KT

MINUTES: These had been published in QSX. ZS2BS proposed and ZR2BE seconded their adoption.

ARISING: Nil.

FINANCE: R196 sent to HQ, and R3 approx. for stamps for OSX.

CORRESP: Nil.

GENERAL:

- (1) The Branch AGM takes place next month. We must appoint an auditor. Volunteers were called for but none present were available. The Chairman had contacted Dave Cox ZS2GT and he was willing to do the job.
- (2) ZS2BS gave a short report on last Saturdays CQ-Hou Koers operation. A total of 35 QSO's was made, during which 21 different commandos were contacted. Thanks were extended to all who had assisted.
- (3) All PMG exam results have been received. The Chairman congratulated all those who had passed. Several new ZR calls have been allocated.
- (4) A DF hunt will be held on Sunday. Colin ZS2AO is to be the fox. The Chairman apologised for not having put details of the hunt in the last QSOX.
- (5) The Chairman wished Colin ZS2AO a successful trip to the USA.
- (6) Subs: to date 73 members have renewed. 35 still outstanding. The Chairman reminded members that subs will be accepted in two installments if desired.
- (7) As yet, no news has been received of Andre ZS2BK who is presently in G land.
- (8) The Chairman asked about CW classes. Nothing has been started yet due to the long delay experienced with exam results. Also mentioned was the fact that Colin would be unable to start practice sessions till the end of September due to his trip to the USA.
- (9) The new repeater destined for the Cockscomb was still under construction, with a few minor things to be done. It is hoped to put it on test next weekend.

There being no further business, the meeting closed at 20h26.

sgd.
R .W.Schonborn ZS2RS
CHAIRMAN.

sgd.
B.A.Weller ZS2AB.
SECRETARY.

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BRANCH MEETING.

The next meeting of the Port Elizabeth branch takes place on Friday 20 October at 8pm. The venue as usual, is the YMCA Havelock street. Mr. Bartie of the Naval Cadets will address the meeting. Colin ZS2AO will possibly show a few slides taken on his recent trip to the USA and give a short account of his wanderings.

KIDDIES XMAS PARTY.

This outing aimed at the juniors, i.e. 12 years and under is scheduled for Saturday 16 December. The venue will be the same as last, namely Walmer Scout Den. Besides the usual games etc for the small fry (weather permitting), a film show is also on the program. Parents are once again requested to provide a small gift which will be handed out by the bearded man in red.

Bon voyage to Lionel ZS2DD and XYL Doris who left last week on their annual holiday.

S.A. RADIO LEAGUE.

P.E. BRANCH

30 th June. 1978.

INCOME & EXPENDITURE ACC.

EXPENDITURE.

Delegates Exp.	62.48
QSL P.E.	83.52.
P.O. Box Rent	5.00
Rent of Room.	11.00
Licences.	4.15
Post & Stat.	15.75
Branch Dinner.	103.57
Xmas Party.	30.00
Refreshments	5.81
QSL (Loss)	5.00
Excess of Income over Expenditure.	188.86
	<u>R515.14.</u>

INCOME.

Branch Subs.	270.00
Interest (F/Dep)	59.40
" Savings	13.98
P.E. Award	25
Donations.	64.00
Bank Charges.	1.21
Xmas Raffle.	97.00
Profit (Logs)	9.30
	<u>R515.14.</u>

BALANCE SHEET.

Accum. Funds.	770.05
add VHF Fund.	119.16
add Excess.	188186
	1078.07
Creditor. YMCA	5.00
	<u>R1083.07</u>

Cash on Hand.	4.35
Bank.	430.52
Fixed Dep.	600.00
Debtor. (UBS)	18.00
Stock. Badges.	10.00
QSL	15.00
Logs	5.20
	<u>R1083.07.</u>

F.G BURRELL ZS2CY
Hon. Treas.

C.B. Franz. ZS2GF
Hon Aud.

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ANNUAL DINNER DANCE.

The Annual Dinner Dance of the Port Elizabeth Branch will be held on Saturday 9 December 1978. The venue is the Zodiac Room, King Edward Hotel, Belmont Terrace. Kick off time is 8pm. Tickets are available from committee members at R7. per couple. The price to non members is R10. The R3. subsidy for members will once again come from a raffle. These tickets will be made available at the next branch meeting. The prize will be announced at this meeting.

JAMBOREE ON THE AIR.

This annual event takes place on Saturday/Sunday 21/22 October and once again the P.E. Branch will be participating. A station will be set up at the Walmer Scout Den and will be operational on both days. As usual operators are needed to assist and willing members should indicate their willingness at the meeting.

Better Than A Quad?

—try a delta loop

It has been said that, before anything worthwhile can be done, there must exist a need. In my case, the need was for a good cheap directional antenna for 15 meters. It had to be something much better than a dipole, but about the same cost.

After weeks of searching for a ready-made low-cost beam and being stunned by prices in the one-hundred- to two-hundred-dollar bracket, the idea finally came to me that I must consider a home brew job or stay with the dipole. So the search for that just-right design began. A quick look through one handbook offered first a simple two-element yagi and then a two-element quad. For DX, this handbook says the quad

is better, but it is also quite large, fairly heavy, and needs mounting high off the ground. I have neither a tower nor a heavy-duty rotator, so the search continued.

After reading on, I found a brief article about an antenna that some DX operators consider to be better than a quad. It was described as fairly small for 15 meters and also lightweight. But why had I never heard one on the air? Why had I never seen one advertised for sale? There had to be some disadvantage. But there it was, in clear print: "Some DX operators say the delta loop is better than a quad." There was only one thing to do — build it and give it a try.

The description of construction of "the delta" was not very clear, although there was a formula for element spacing and loop lengths. (See Table 1.) After calculating the reflector length for the middle of the band, I came up with 48.3' total length, or 16.1' per side (not bad). The reflector length turned out to be 47.1' total length, or 15.7'

per side (not bad, either).

However, after calculating the spacing using $\lambda/0.185$, I found that the elements would need to be 248' apart. No wonder nobody ever used a delta; it would be a monster. A 248' boom would be a little bit of a problem. Something was wrong. I checked my calculations, and they were okay. So I thought it had to be a misprint in the formula — $\lambda/0.17$ to $\lambda/0.20$ should have been 0.17λ to 0.20λ , I guessed. Anyway, this is the formula I used. I came up with a boom length of 10'0" (not bad), so my delta was built using 10'0" element spacing on 15 meters. See Fig. 1 for parts and assembly.

Assembly time from start to finish was no more than six hours, and no special tools were required for construction.

After finishing building the antenna and mounting a TV antenna rotator on a short mast only about five feet above the roof, it was very little trouble for my

XYL and I to lift the 12-pound structure to its final resting place. The total boom height after mounting was only 20 feet from the ground and about 80 feet below the tops of dozens of hardwood trees on my lot.

Adjustment of the antenna gamma match was another easy matter. With the help of a neighbor ham, tuning took only five minutes. With the clamp bar all the way to the top of the 36-inch gamma rod, just a half turn of the capacitor brought the swr down to a respectable 1.1 to 1. To my great pleasure, I found that at no point across the entire 15 meter band did it rise above 1.5 to 1. Everything had gone fine so far, and there was only one test left.

That test has been taking place over the past two months, using an HW-101 Heathkit barefoot, mostly in the phone portion of the band.

The first few days of operation with the delta loop were spent with the antenna

$$\text{Reflector total length} = \frac{1030}{f(\text{MHz})}$$

$$\text{Driven total length} = \frac{1005}{f(\text{MHz})}$$

$$\text{Element spacing} = \frac{\lambda}{0.17} \text{ to } \frac{\lambda}{0.20}$$

Table 1.

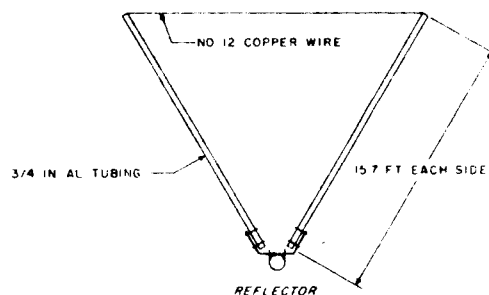
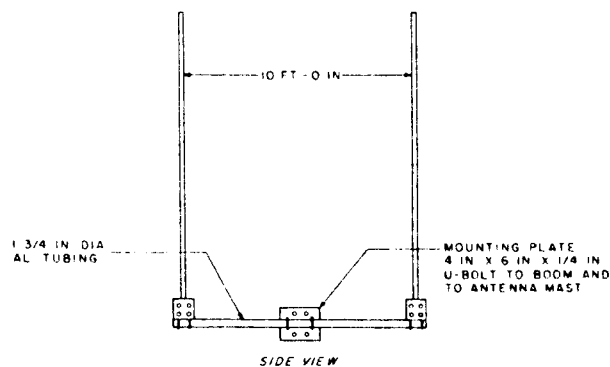
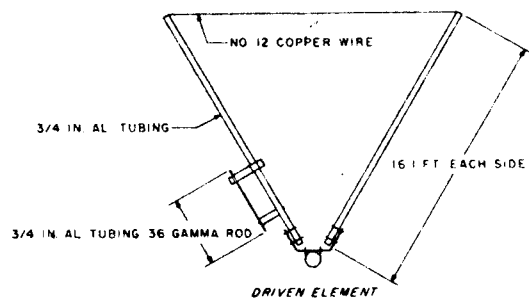
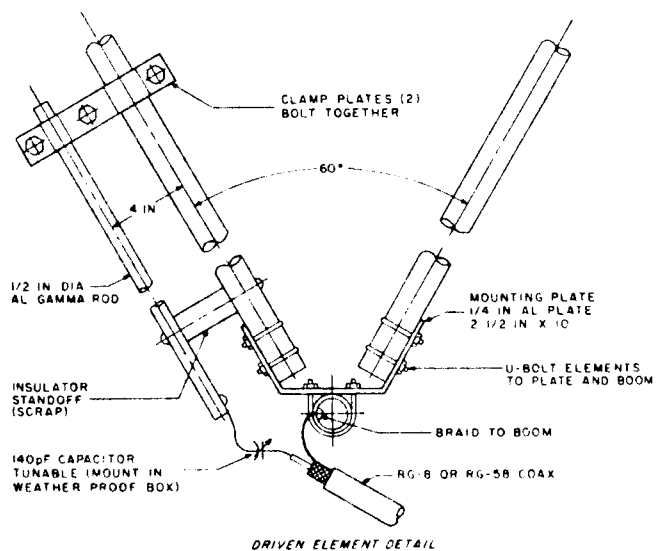


Fig. 1.

pointing west and with me enjoying compliments on the fine signal from Alabama which was reaching the west coast. One of the first good characteristics that I discovered about the antenna was that it was very directional, especially on receive. With a 30 dB over S9 signal from California being received, turning the loop off 90 degrees either way would knock the signal down to an S2 or S3 reading. So, with this in mind, I began search-

ing for maybe just a little DX.

First a German field day station with an S9 report was added to my logbook. Then I had a first-time contact with Hawaii with another good report; then Alaska, another new one for me. So the delta loop was working, and I was well pleased.

More proof that the loop is a great DX antenna has come in the past few weeks. With not a lot of on-the-air time, mostly in the evenings

after work, there have been contacts with Japan, Russia, and over 20 European countries, all with fine reports and with multiple contacts in most of them. My prize so far was a good contact with an Italian station running only three Watts on phone. My first CQ on the 15 Novice band netted Czechoslovakia and the Netherlands, also a low-power station.

If I sound thrilled, it is because I am. Of course, the performance of the delta

would not seem so great to an operator who had been using a beam all along. But, for a fellow who has been using a dipole, it is a whole new world. It will give you a good chance in a big DX pileup, even if you are running low power with a low antenna height.

Three other local hams are now building delta loops for their own use, and, if you also would like to knock 'em for a loop, try the delta loop. It is better than a quad! ■