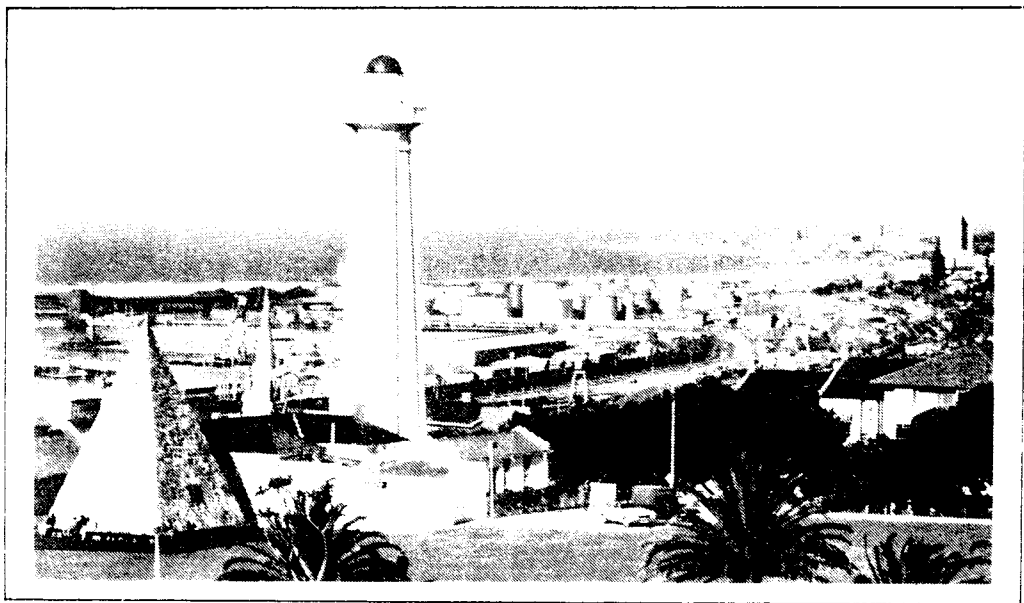
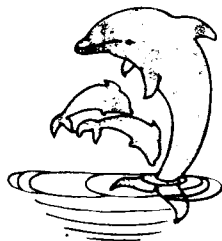




# Q S X P E



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

P.O. BOX 10402  
LINTON GRANGE  
6015

02/90

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
18 February	Bill ZR2AAN	ZS2RL	ZR2AAN
25 February	Al ZS2U	ZS2U	ZS2AO
4 March	Beavan ZS2RL	ZS2RL	ZS2CTR
11 March	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 145,650 MHz - Town Repeater

BULLETIN UPDATE

7.30p.m. - 3695 kHz in 80 metre band - relay on 145,700 MHz,  
with automatic relay on 51,400 MHz - VHF news from ZS2FM.

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 16th February 1990, at St. Martins Church, Kabega Park at 8.15p.m.

THE MEETING WILL BE ATTENDED BY RENO FABER ZS6OF IN HIS CAPACITY AS PRESIDENT OF THE LEAGUE.

Please make every effort to attend and meet Reno.

## ANNUAL BRANCH PARTY

This will be taking place on Saturday 24th February and will be a Travelling Supper. All members and their wives are invited to attend. The price will be R12.50 each.

We will start at 7 p.m. at the QTH of Colin and Marlene, 5 Hamerkop Street, Cotswold and we will travel by bus Glen Hurd, the home of Lynne and thence to Kitching Road, Charlo -the home of Trevor and Julie and back to Cotswold.

PLEASE LET MARGE ZS2OB (PHONE 304597 OR 303498) KNOW BY THE LATEST 19TH FEBRUARY IF YOU WILL BE ATTENDING. PLEASE PAY COLIN ZS2CTR ONLY, EITHER BEFORE THE PARTY OR THAT EVENING.

## HAMNET SIMULATED EMERGENCY CONTEST. IMPORTANT REMINDER

This contest is open to all radio amateurs and will be held on Sunday 11th March from 1400 to 1700 S.A.S.T. The two categories are single operator portable and multi-operator portable and it will take place on SSB on the 40 metre band For full details, see your previous issue of QSX or contact A1 ZS2U, telephone Home 302983 or work 5311141.

## RENEWAL OF LICENCES

By now, members should have received their licence renewal forms from the Postmaster General's Office. Please remember to take them along with you when you pay so as to avoid any hassles. Don't forget - if you do not renew in time you stand to lose your licence and may have to rewrite the technical exam to have it re-instated.

## MARION ISLAND

Peter Sykora ZS6PT is active from Marion Island with the callsign ZS8MI and will be there for another year. If you have not yet worked this rare country, look for Peter on the bands.

## WALVIS BAY

The new callsign for Walvis Bay is ZS9, but to date has not achieved separate DXCC country status.

## CONGRATULATIONS

To Jim van Loggerenburg ZS2LR and Jim Jack ZS6YW who have qualified for the Algoa Bay CW Merit Award with over ONE THOUSAND CW contacts each. Well done Jim times 2!

## COMPUTER PROGRAMME

For those of you who are keen VHF/UHF operators and take part in the contests, Bill Browne ZS2BY has a programme which will immediately give you the Grid Square number, given the co-ordinates. This programme is available in a number of formats. For more info, phone 041-313343.

## S.A.R.L. H.F. CONTESTS

From information just received from Bud ZS2CA, we learned that ZS2PE operated by Marge ZS2OB and Brian ZS2AB were the Division 2 winners in the Phone Contest and Bus ZS2CA was the regional winner in the CW contest.


## Instant Printing



TELEPHONE 22614

9 ST. PATRICK'S ROAD  
PORT ELIZABETH  
6001

**FOR ALL YOUR COMMERCIAL PRINTING REQUIREMENTS**

**TRY US FOR YOUR QSL CARDS!**

MINUTES OF GENERAL MEETING OF THE PORT ELIZABETH BRANCH OF  
THE S.A.R.L. HELD AT ST. MARTINS CHURCH, PORT ELIZABETH ON  
FRIDAY 19TH JANUARY, 1990.

PRESENT: 37 members and visitors.

APOLOGIES: as per register.

The Chairman extended a welcome to all, especially to Phil ZS2PP and Pam from Port Alfred, Sakkie ZS2ID from Uitenhage John ZS2JR and the ladies, Peggy, Vicky and Jane.

MINUTES: The Minutes of the November meeting having been published and circulated in QSX-PE were taken as read, proposed by Lynne ZS2MM and seconded by Garth ZS2HB.

MATTERS ARISING: (1)Members were shown the Scout Award presented to the Branch for their help during the past year.

(2)Raphy ZS2SP felt that the minutes did not express the true happenings regarding the QSL cards. He felt that in the future a vote should be taken on definite matters. As far as QSL cards being printed in bulk was concerned, he felt members should be given the opportunity to express their views and a definite vote be taken. Three members showed interest in buying bulk-printed cards but an amount of only 2000 would be sold initially. After a vote, it was decided not to pursue the project.

(3)Raphy also felt the idea of bumper stickers should be followed up. Marge said that she had sent all the details to HQ who had said they would print them in Radio ZS as an advertisement for the account of the Branch.

CORRESPONDENCE: (1)Branch newsletters and licence renewals  
(2)2 applications for the Algoa Bay CW Merit award from Jim ZS2LR and Jim ZS6YW.

(3)Preliminary notice of League AGM.

(4)Letter from President thanking the Branch for the articles for Radio ZS.

(5)Letter from President amending our motion re life membership for past presidents.

(6)Letter from President re our fax informing them of our new Committee.

(7)The Chairman read a letter she had written to Council and their subsequent reply.

(8)Latest Council minutes.

ARISING: (1) Bill Browne ZS2BY mentioned his visit to a WARC conference re 10 MHz band. He stated that the use of this band would be ideal for domestic use and would not cause interference beyond our borders. It should be used until such time as there were complaints.

(2) Regarding antenna legislation problems being experienced in Durban and Cape Town, Bill ZS2BY agreed that a personal approach to the relevant authorities would be the best avenue.

(3) There was a brief discussion on Hamnet and representation at Branch level.

FINANCE: Colin ZS2CTR tabled the financial report. The situation was healthy.

GENERAL: Future Activities:

Members were reminded of the Hamnet Braai and Activities on 28th January. Al ZS2U elaborated on the planned agenda.

Branch Annual Social. A travelling supper will be held on 24th February. Hopefully costs would be below R15 per head.

Packet System. Lionel ZS2DD reported a problem with the power supply. It was hoped to have this rectified by the weekend.

Various certificates and awards mentioned in the article by Al ZS2U were on display for members.

At this stage, the Old Timers Certificates were presented to those present: Allan ZS2AJ, Garth ZS2HB, Van ZS2Y, Sakkie ZS2ID, Jim ZS2IR (also received his Algoa Bay CW Merit Award), Gus ZS2MC and Lionel ZS2DD.

It was noted that several other members also qualified for this award and application would be made this year.

At this stage the meeting was closed and tea was taken.

Thereafter, the 'Old Timers' were invited to speak briefly on how they got interested in amateur radio and not to be outdone, several of the not-so-old timers also told their stories. There was much amusement, much nostalgia and much to be admired at the perseverance and ingenuity displayed by those who were determined enough to get their licences, and keep them, come what may. Eventually everyone left by about 11 o'clock!!!

sgd: M.T. Weller ZS2OB  
Chairman

Sgd: R.W. Schonborn ZS2RS  
Secretary

## HAMNET NEWS

by Al Akers - Regional Co-Ordinator Division 2.

### Hamnet General Meeting

Regrettably this meeting was poorly attended, with only 14 members turning up. Nonetheless, it proved both interesting and enjoyable. The meeting started off with two talks by Ken ZS2OC. This was followed by a braai and then the antenna efficiency competition. It was not easy to determine which antenna was best due to the variety of antennas tested, but the 1/4 wave on Bud ZS2CA's vehicle was adjudged the best performer. Here are the results of the test:

<u>Call</u>	<u>Name</u>	<u>Antenna</u>	<u>Gain(db)</u>	<u>SWR</u>
ZS2CA	Bud	6+6 element skeleton slot	12,5	1,5
ZR2AAN	Bill	Slim Jim	3,8	1,4
ZS2U	Al	5/8 wave on kombi	3,8	1,5
ZS2CA	Bud	1/4 wave on vehicle	2,9	1,5
ZS2U	Al	1/4 groundplane	1,5	2,1
ZR2AAN	Bill	5/8 wave magnet mount on vehicle	0,5	2,4
ZS2CA	Bud	1/4 wave magnet mount on vehicle	0	2,0

Note that gain figures are referenced to the poorest performer which is listed as 0 dB. Measured front to back ratio of the skeleton slot was 22,5 dB and the front to side ratio was 12,7 dB. Bear in mind that these tests can hardly be considered to have been made under ideal conditions and must therefore not be taken too literally. What I think is important is that these tests showed that the two magnet mount antennas were not up to standard and we have probably established the causes already.

### HAMNET LIAISON OFFICERS

Recently several Hamnet members were requested to act as liaison officers for their cities or towns. A few have written to find out what duties they would be expected to fulfil. Essentially, this will be to provide liaison between the Regional Co-ordinator and the Civil Defence Organisations in their cities or towns. This will be low key. Details will be made known to liaison officers in due course.

## WHAT CAN AMATEUR RADIO ADD TO YOUR LIFE?

by Marge Weller ZS2OB

The facets of ham radio are many and varied and not every one will find each of them to his or her taste, but the main reason most of us got our licences in the first place was to communicate with other people, in one form or another. Some will argue with this and say that their main interest is technical - merely building equipment or taking it to pieces to see how it works, but there are very few hams who can say they have never switched on their rigs for a qso.

Amateur radio can widen your horizons. If your own personal life is restricted in any way, ham radio can open new worlds to a fuller life. The contacts radio gives you are really great; you can have a friend in every place you go. The next time you have a chance to talk to a ham in a dx country, TALK to them. Don't just give them a report, your name and QTH. Tell them about your town and country, tell them what interests you, what the special landmarks are in your area and ask them about theirs. Talk about your family and ask about theirs. Soon it could become a firm friendship, and what a thrill it is to actually meet someone in person that you may have spoken to many times. If the contact is brief, take the time to look up their QTH in an atlas or geography book and try and find out something more about the country and its customs. If nothing else, it will be a help in Trivial Pursuit!!

Amateur radio is a good release from pressures. Whatever side of radio you enjoy, after the tensions of a day at the office or in a busy home, how nice it is to relax in your shack doing the things you like doing. It could be building equipment or making contact with others on the air and perhaps meeting others who are lonesome and pressured as well. One meets new people and when you become involved you forget about your own problems. Like exercise, it is a good release from the hustle and bustle of life.

Amateur Radio is perfect for women. For many who are more or less confined to their homes caring for husbands and children, or for those who are somewhat lonely with free time, ham radio is the answer. It fits in perfectly with the career of housewife and mother. It is shame to think of so many expensive items of equipment sitting on the



shelf all day while the OM is at work. The YL of the house could be having a ball!! You can watch the children, stir the dinner and operate all at the same time. It might be a good idea to use Morse code so that any yelling and screaming won't be heard by the person you are talking to!! Best of all, it's wonderful to be able to share a hobby with your partner.

Amateur Radio is fun. Whether it be the thrill of competition in contests or making friends all over the world, or the anticipation of the arrival of a special QSL card towards a certificate, it is fun. Attending meetings and social events and meeting new people can also broaden one's horizon. Nowhere is there so much friendship as in amateur radio. If you're a stranger in a city, there is always the 2 metre repeater to find someone to chat to or even just ask directions. And the welcome mat is out everywhere. No matter where you travel you need never be alone.

Amateur radio is a great equaliser. It is a hobby enjoyed by all walks of life, from kings to peasants. And you never know what level of society you are talking to. No one talks down to you, most times you don't even know the colour of his skin, his occupation, his bank balance, his status in life. The shared interests are radio and perhaps it is only long after you have chatted that you realise that you have spoken to a king, prime minister or even someone at the other end of the scale. It matters not. People grow by sharing ideas, and it is a way to have more happiness in your life and a good way to pass it on too.

Amateur radio can open career opportunities. How many youngsters have become interested in ham radio because their dad or mom were licensed, only to find that their interest leads to a career in radio or electronics? It could be their knowledge of antennas and circuits that gets them a job. On the other hand, it could have been the fact that your job was in electronics or electricity and you then became interested in communicating.

After all, regardless of the method, that is what amateur radio is all about. Whether you spend time communicating on the air or become involved in the administrative side of the hobby, it's the giving in life that's important.

SOLAR POWER  
(from CQ Boland November 1989)

The photo-electric principle was discovered in 1876 by Adams and Day and it is difficult to imagine how satellites would get their electric power if it were not for solar panels. The first satellites were equipped with batteries which could not be charged and therefore soon stopped working. A few satellites were equipped with atomic-powered power-supplies but they were principally for space vehicles which would move far away from the sun and therefore could not get enough solar power to recharge their batteries. An example of this is the space ship Galileo which made the news headlines just recently. In 1972, the space ship Pioneer was launched and is already 7000 million kilometres from the Earth and is still transmitting data back to Earth.

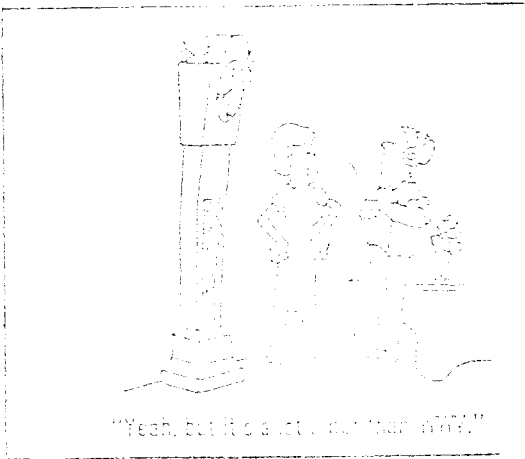
It is the size of the solar panels which limits the power output of transmitters, the number of transmitters and also the bandwidth of the transmitters. The efficiency of solar cells is constantly being improved and the higher power of launching rockets makes it possible to get bigger solar panels into space so that more powerful transmitters can be built into satellites.

Twenty years ago, panels of only 100 Watts could be used, while present day satellites have solar panels of 1 kilowatt. Soon, satellites with solar panels of 2 to 4 kilowatts will be launched, while a satellite with solar power of 7,5 kilowatts is being planned for this year. Last year, a satellite was launched with panels of 13 square meters. The solar power in space is 1,4 kilowatts per square meter. This means that the satellite receives 18 kilowatts of solar power.

Not all the solar power is converted into electricity because there are open spaces between the solar cells and the solar cells efficiency is less than 15%. Thus there is only about 1,26 kilowatts of electricity actually available. In some satellites, electric motors are used to turn the panels to face the sun continuously, while the antennas are pointed to Earth. Sliprings are used to carry the power through the turning axis of each panel to the satellite. Needless to say these mechanical components must be utterly reliable to last for the 10 years lifetime of the satellite.

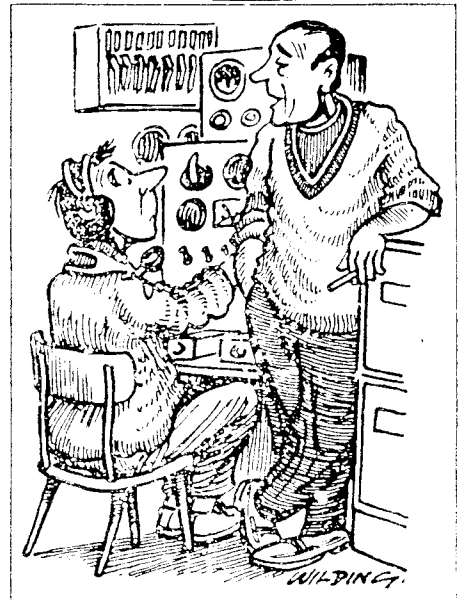
Satellites regularly move into the shadow of the Earth and must then rely on batteries for those times when solar power is not available. It is a pity that solar panels cost so much and so few people can afford them. A 1-Watt panel costs R62 and a 30 Watt panel costs easily R600.

It is important that an effective voltage and current regulator is connected between the panel and the battery to ensure that the battery is not overloaded, without allowing too much power to be lost in the regulator. Locally, there are certain companies which sell solar panels and regulators together with water pumps, TV sets, freezers and other apparatus. In each case, the system has been designed as a single unit.

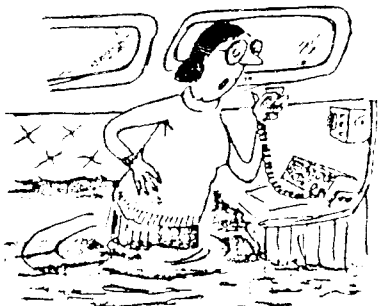


"Yeah, but it's not as tall as mine."

Hi!



"Trouble with this life, old man, one gets too out of touch with the world".



"Exchange please. What's all this Mayday nonsense. This is an emergency call."