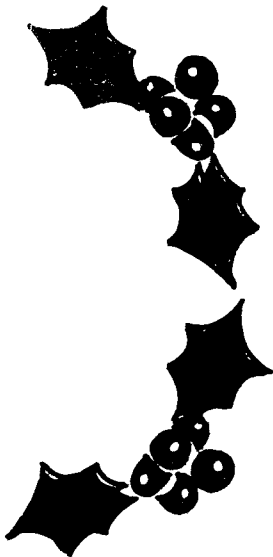


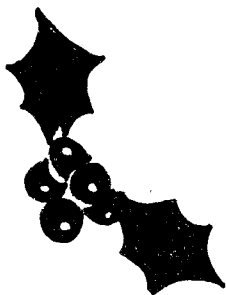
Q S X P E



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

P.O. BOX 10402
LINTON GRANGE
6015

12 / 88




PORT ELIZABETH BRANCH.
NOTICE OF MONTHLY MEETING.

Members are reminded that there is no Meeting of the Branch during December. The next meeting will be on the 3rd Friday in January 1989.


COMMITTEE.

CHAIRMAN	Marge Weller	ZS20B	30-4597
VICE CHAIRMAN	Brian Weller	ZS2AB	30-3498
SECRETARY	Owen Wheeler	ZS2HZ	38-1310
TREASURER	Colin Robertson	ZS2CTR	30-0570
SPECIAL/SOCIAL	Beavan Gwilt	ZS2RL and	30-6968
EVENTS	Dick Schonborn	ZS2RS	2-1356
AWARDS	Bill Hodges	ZR2AAN	51-2580
EDITOR QSX-PE	Marge Weller	ZS20B	30-4597
MEMBER	Lynne Crothall	ZS2MM	35-4671
REPEATER WORKING			
GROUP - CHAIRMAN	Trevor Scarr	ZS2AE	32-1746
LIBRARIAN	Colin Ashwell	ZS2A0	31-2471

BULLETIN ROSTER.



DATE.	COMPILER.	40m NET.	2m NET.
18 December	Beavan ZS2RL	ZS2RL	ZS2MM
25 December	No Bulletin - general call in		
1 January	No bulletin - general call in		
8 January	Lynne ZS2MM	ZS2MM	ZS2AB
15 January	Marge ZS20B	ZS20B	ZS2CTR



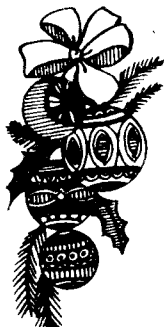
Sunday Bulletin Information

PRIMARY FREQUENCIES FOR BULLETINS AT APPROXIMATELY 08:40
H.F. 7098 KHz IN 40 METRE BAND
V.H.F. 145.650 MHz VIA TOWN REPEATER

BRANCH V.H.F. SERVICES PROVIDED

TOWN REPEATER (P.E. CENTRAL)	145,050 / 145,650 MHz
GRAHAMSTOWN REPEATER	145,150 / 145,750 MHz
LADY'S SLIPPER REPEATER	145,100 / 145,700 MHz
COCKSCOMB REPEATER	145,000 / 145,600 MHz
R.T.T.Y. BULLETIN BOARD	145,150 / 145,750 MHz
BEACON (C.W. ID ZS2PE)	144,910 MHz

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



THIS AND THAT



SEASONS GREETINGS

It is absolutely incredible how quickly a year passes! Only a few days ago seemingly, I typed the Christmas message from the Chairman - but that time it wasn't me! The year has been a fairly successful one for the Branch, although we lost three members who went Silent Key. We have enjoyed several happy social events. We hope that 1989 will prove to be a year of achieving great things in the area and hopefully membership will grow to even greater numbers. On behalf of all the Committee members and myself, I would like to wish Council, the staff of Headquarters office, all the members of this Branch and the members of all Branches of the League and their families, a very happy and blessed Christmas and Chanukah and may 1989 be a year of peace, happiness and good health, and with these, we don't really need much more.

CONGRATULATIONS

To Robbie Frost who acquired the callsign ZR2ABC, although the P.M.G. tried to re-locate him to the Western Cape.

SIX METER LINK

The 6-to-2 metre link on the Ladies Slipper Repeater was approved at a recent Branch meeting, the equipment has been bought and tested and once all the final arrangements have been made, will be installed to open a new world of dx-ing to those who do not have 6 meter equipment but would like to try it out.

BRANCH LUNCH

On 27th November, 40 members, wives, children and visitors met at Wyndomayne Tea Garden for a most enjoyable lunch and everyone agreed that it really was worthwhile and should be done again sometime in the future. Thanks to Beavan ZS2RL for the organisation.



NEED THERE BE LINE OF SIGHT?

Ask that question of any amateur who is actively exploiting the capabilities of the bands over 50 MHz, and you will receive a resounding "No!" But all too many amateurs whose interest in VHF bands is limited to using a Handie-Talkie through the local repeater still believe that, in this part of the spectrum, propagation stops at the horizon. This view is shared by a large number of professional radio people, especially those specializing in radar.

It was surprising to me to discover recently that 56 years ago, the father of radio, Guglielmo Marconi, conducted experiments at about 500 MHz between the coast of Italy and a yacht cruising offshore. I came across this significant piece of radio history while looking through a stack of 'Proceedings of the Institute of Radio Engineers', which have been languishing in my basement for the past 20 years. The translation of Marconi's last paper by Professor R.M. Fano, was submitted to the 'Proceedings' by Thomas J. Carroll of MIT's Lincoln Laboratory and appeared in the August 1956 issue. In a few paragraphs, Marconi describes work conducted in 1932 and 1933. During the latter series of tests, Marconi's shore station consisted of a 25 Watt transmitter feeding a dipole, backed up by a 2 metre parabolic dish which was mounted on a building at 38 metres above sea level. The shipboard receiving installation employed a similar dish mounted five metres above the water. Presumably the transmitting location was within sight of the coast.

Concerning the results of these tests, Marconi wrote: "In spite of the fact that the optical distance was only 30 kilometres, the radio-telephonic and radio-telegraphic signals sent by the transmitting station were received on the yacht with clarity, great strength and regularity at a distance of 150 kilometres, that is five times the optical distance". He further said that he could not incrementally extend this range due to the geography of the coastline; nevertheless, he noted that "Morse signals were detected very feebly and with slight fading, but often legible at 258 kilometres".

Marconi concludes that: "The speculation that may arise from such results concerns the entire theory of radio transmission over distances greater than the optical one". He promised further experiments and a more detailed paper but, unfortunately illness and his subsequent death prevented him from carrying out these plans.

Marconi, despite his affiliation with successful commercial interests, often characterised himself as 'an amateur'. I think that we can all detect some amateur spirit in these early microwave experiments. If he had been in better health and had lived longer, Marconi might well have brought home the message that something goes on at these short wavelengths which results in propagation well beyond line-of-sight, and that substantial variations occur with changing weather conditions. As it was, the amateur community undertook most of the early propagation research on frequencies above 56 MHz. Anything above 30 MHz was called the 'Ultra-highs' in those days.

Ross Hull, an import from Australia who worked at the A.R.R.L. Headquarters in the mid 30s, was one of those who believed that these frequencies are good for something besides line-of-sight and demonstrated it in many experiments. Ed Tilton, W1HDQ, the originator of this column was another. Ed specifically addressed the question of a feature article carried in the March 1946 issue of QST. It was appropriately entitled, "Need there be Line-of-sight?" and particularly dealt with getting out on 2 metres from poor locations. Nevertheless, it also evoked the question relative to extended range work between better located stations. In those days, people didn't know that it is possible to consistently work over paths of 300 miles or more on 2 metres. Appearing as it did soon after we got back on the air at the conclusion of World War 2 and just following our move from 112 to 144 MHz, W1HDQ's article and succeeding references to the subject in this column, set the stage for numerous amateur VHF accomplishments during the late 1940s and into the 1950s.

I thought that some readers might be interested in a little bit of early history of what we now call 'the world above 50 MHz'.

(Acknowledgements to 'The World above 50 MHz', QST - Bill Tyman W3XO.)



THE WOMANS WAY.



When I build my better world, I know one thing that's going to be outlawed - this is womans intuition.

Take the matter of starting the car on a cold morning. I am standing in the garage, already 20 minutes late for work, glaring at the hunk of inanimate metal. I have primed the carburettor, checked the plugs, filed the points. At this point my wife walks in. "That number plate looks loose to me", she says "That's why it probably won't start". In icy silence I tighten the number plate and press the starter. The car not only starts but the dashboard clock also starts ticking and the roof light, which hasn't worked for 4 years, suddenly shines like a little star in the sky.

That's womans intuition. If the radio gives up, it is foolish to worry about transistors or diodes. You slam the desk drawer three times and in comes the announcer just as though standing there in the room. My wife informs me of this in the tone one uses for a child. If my electric shaver does not work, do I worry? No, I go down into the basement and kick a certain pipe. Sometimes I fail to kick the right pipe and have to be led down again and shown, but it always works. If the air-conditioning goes off, I just reach up and drop a cent on the thermostat. "I discovered that last winter", my wife informs me calmly.

Occasionally I get a little confused. Yesterday for instance, I was tinkering in my workshop and the electric drill wouldn't work. "Dear", I sang out, "Would you know why the drill is not working?" "Certainly" she called out from somewhere overhead, "You'll have to change your shoes".

Reluctantly I tramp all the way upstairs. I search about until I find an old pair of tennis shoes. I put them on, but still the drill does not work. Just then my wife comes downstairs. "What", she says, "Are you doing in those old tennis shoes?" "I changed them so that the drill would work", I say and then add triumphantly, "But it still doesn't work".

"Of all the boneheads", she moans, "I said: change the fuse, it blew out yesterday morning. Who ever heard of making a drill work by changing your shoes?"

Of course nobody ever had.



DID YOU KNOW?



That in 1907, Marconi's mighty Clifden station was powered by steam engines totalling 1100 horse-power (820kw)?

To establish a wireless telegraphy link across the Atlantic with his station at Glace Bay, Canada, Marconi in 1907 built an unprecedentedly powerful 300kW transmitter at Clifden, in the west of Ireland. He used steam engines developing a total of 1100 h.p. to drive high voltage DC generators which operated with his newly invented high-speed 'disc discharger'. His 1,16MFd capacitor consisted of 1800 sheets of galvanised steel 9 metres by 3,8 metres suspended from insulators and separated by a wide air space. It operated reliably at 80 000 volts and occupied a huge building over 100 metres long. The directionally aligned antenna stood 62 metres high and utilising over 18 kilometres of wire, covered an area of one twentieth of a square kilometre.

Owing to the remoteness of the site - the only access was by means of its own light railway - the steam engines had at certain seasons to be fired by peat dug from the surrounding bog. The station operated successfully until 1921, when it was blown up by Irish rebels.



COMMITTEES AND MEETINGS.

Having served on various Committees, I have drawn up a list of rules:

Never arrive on time, or you will be stamped a beginner.

Don't say anything until the meeting is half over; this stamps you as being wise.

Be as vague as possible; this prevents irritating the others.

When in doubt, suggest that a sub-committee be appointed.

Be the first to move for adjournment, this will make you popular - it's what everyone is waiting for.

In any given meeting, when all is said and done, 90 percent will be said and 10 percent will be done.



CONDITIONS OF EMPLOYMENT IN THE PRIVATE SECTOR.

SICKNESS.

No excuse. The firm will no longer accept your doctors certificate as proof. We believe that if you are able to go to the doctor, then you are able to come to work.

DEATH (other than your own)

This is no excuse. There is nothing you can do for them and henceforth no time off will be allowed for funerals. However, this should cause some hardship to some of our employees, therefore the firm has a special scheme in conjunction with the Union for lunchtime burials, thus no time is lost from work.

DEATH (your own)

This will be accepted as an excuse. We would like two weeks notice however, since we feel it is your duty to train someone else for the job.

LEAVE OF ABSENCE FOR AN OPERATION.

We wish to discourage any thoughts you may have of needing an operation and henceforth no leave would be granted for hospital visits. The firm believes that as long as you are an employee here you will need all of what you already have and should not consider all your parts as your own and have anything removed, this would mean we would be getting less than we bargained for. If anything drops off, then please consult the foreman during your teabreak ONLY.

VISITS TO THE TOILET.

Far too much time is spent on this particular practice. In future, the procedure will be that all personnel shall go in alphabetical order. For example those with the surname starting with 'A' shall go from 9h00 to 9h10, and 'B' will go from 9h10 until 9h20, etc. NOTE. Those who are unable to attend at the allotted time will have to wait until the following day till their turn comes.

TEA BREAK.

During the 4 minute tea break, personnel are reminded that they are allowed one cup each with one teaspoonful of sugar and sufficient tea to fill the cup one inch from the rim of the cup.

OVERTIME.

All staff will be given 2 hours free overtime. 'In Honoratium' provided that they work in the TTS department and they do not book it on the operators roster. This is aimed to confuse everyone and to make everyone feel that they are wanted, actually they will not get the two hours, but it looks better on the time docket.

LEAVE.

All personnel when taking their leave, must report daily to the foreman on the desk to ascertain whether he still requires their services. Failure to do so will result in the firm taking on someone else in their place.

NOTICE.

When handing in your notice, staff members are reminded that it must be done 6 months in advance. On the other hand, the firm can give staff not less than 5 minutes notice to clear the building.



Instant Printing

9 ST. PATRICK'S ROAD
PORT ELIZABETH
6001

TELEPHONE 22614

FOR ALL YOUR COMMERCIAL PRINTING REQUIREMENTS
TRY US FOR YOUR QSL CARDS!



TIPS FOR CONSTRUCTION PROJECTS

Chuck Gollnick KA7QEN

Here are some suggestions for any readers who might be interested in project construction:

1. Don't start with anything rf. Receivers, transmitters, tuners, linears are all difficult and require a lot of adjustment once they are assembled. As I recently discovered, even a simple dummy load isn't simple. Don't start with a high voltage or high-current power supply either. Anything over 50 volts or 5 amps requires extra care and construction technique. Start with something like a 12 volt 3 amps power supply to run your HT in the house. How about a digital clock? Use a National semi-conductor MA 1023C module and matching transformer from Digi-Key and it'll be easy. Get a Curtis chip and make a keyer. These suggested projects may not sound very exciting technically, but you'll find that project construction is often more mechanical than electrical.

2. You don't have to build most projects in metal boxes. For non-rf projects, plastic is fine. It's inexpensive, easy to work with and doesn't have to be painted. Stick with plastic and you will not need a drill press; an electric hand drill is fine. You won't need expensive and dangerous hacksaws, sabre saws, circular saws or fly cutters either. Holes larger than your drill can make, or odd-shaped openings can be cut quickly and easily with a reamer and some cheap files. Filing out openings in metal is an arduous task, but in plastic even cheap files cut quickly. Here is a tip; to drill a nice hole in plastic, start with your smallest bit and work up to the final size using every bit between them in your index. Hot-melt glue guns work on plastic. A cheap pop riveter is another handy tool. If you do need metal, look for a prefab cabinet that will fit your project. Prefabs may seem expensive, but they're a lot easier and you won't need a lot of tools and equipment.

3. Plan! Document! Much of the work for my projects is done on paper. Start with a good schematic. If you're using any integrated circuits, mark the pin numbers on your schematic. Draw pin diagrams of other parts like transistors next to the part on the schematic. Assign part numbers. Sketch

how the project will be assembled, the layout of parts on circuit boards, and the chassis wiring. Then make a from-to wiring list. With all this planning, your project will be a snap to build and will work the first time. If it doesn't, all the documentation will help you find the problem fast. By the way, keep all of this paper so that if your project ever breaks, you ever want to modify it or you or a friend ever want to build another, it'll be easy. As you correct bugs or add modifications, document the changes.

4. Take your time. Measure twice, cut once. Make test fits as you move along. Check each electrical connection with an ohmmeter. Try to make every solder joint perfect. Use cable ties or lacing tape to form cable bundles. If you have extensive chassis wiring, use wire marker labels. Use heat-shrink tubing and cable clamps as necessary. In short, try to make each project a show piece inside and out.

Project construction does not have to be difficult or complicated. You don't have to be a machinist and you really don't need a lot of expensive tools, either. By avoiding complicated projects at first using plastic boxes whenever possible planning carefully, and working slowly, anyone can enjoy building perfect construction projects. I know I sure do!

Acknowledgements to Ham Radio, June 1988.

Note from Editor: Perhaps the above article might inspire one or more members of the Branch (hopefully, lots of you) to get going on a home-brew project which would qualify for the ZS2AB Home Construction Trophy which has not been awarded for several years. There are also several other Branch trophies which are normally presented at the Branch A.G.M. and full details will be given in QSX-PE early in the new year. Happy building.

WEATHER FAX RELAY PROJECT.

As a number of people have already ordered their kits for this project, and the kits are being assembled and distributed, the temporary relay of the WEFAX signal from Meteosat 3 will be run every evening and over weekends from the time of publication of this issue. The permanent relay from the P.E. Oceanarium will hopefully be arranged fairly soon. If you know of anyone else interested in the project, please have them contact me as soon as possible. de ZS2AB



PETERSEN & SMITHIES

THE Engine Rebuilders
Specialists in Veteran car engines.

3 HANCOCK STREET, NORTH END

☎ 041-543669/0

ASK FOR LEO SMITHIES

HENROSE PRODUCTS (PTY) LTD (EDMS) RPK

MANUFACTURERS OF PLASTIC BAGS
PRODUCERS OF FRUIT JUICES
"ORANG-U-TANG"
AND "LEKKA LIKS" FROZEN SUCKERS

VERVAARDIGERS VAN PLASTIEKSASSE
VERVAARDIGERS VAN VRUGTE SAPPE
"ORANG-U-TANG" EN
"LEKKA LIKS" VERVRIESTE YSBLOKKE

TEL. 545470

5-7 EDGAR LANE

NORTH END

PORT ELIZABETH, 6001

COMPUTER TECHNICAL ENGINEERING

Division of Simwell Simming Club CC

POSTAL ADDRESS

P.O. Box 10317

Linton Grange
6015.

REGISTERED OFFICE.

25 Olive Schreiner Avenue

van der Stel


PORT ELIZABETH.

Telephone: (041) 30-4597

(Answering Machine available)

Registration No.
CK88/13270/23






E.P. MUFFLERS

EXHAUST FITTING AND PIPE BENDING
SPECIALISTS AND MANUFACTURERS

ALSO:
TOWBARS
BATTERIES
SHOCK
ABSORBERS

ALSO IN
GRAHAMSTOWN
(041) 28448
5 HOWSE STREET



MILD STEEL
FULLY
GUARANTEED

STAINLESS
STEEL
LIFETIME
GUARANTEE

545420

29 EMBASSY STREET, NORTH END, P.E.

BAMBOO SNACKS

For delicious Chinese Take-aways
in the Western Suburbs.

OLD CAPE ROAD
KABEGA PARK, PORT ELIZABETH

PHONE 30-4390

Express Number plates
& 'SIGNS'

INC
FLEKTI-PLATE

Reg. 51 01/18 07

Tel 54 2834 / 54 1501 / 54 1652

23a De Villiers St

PO Box 2587

Port Elizabeth

North End 6056