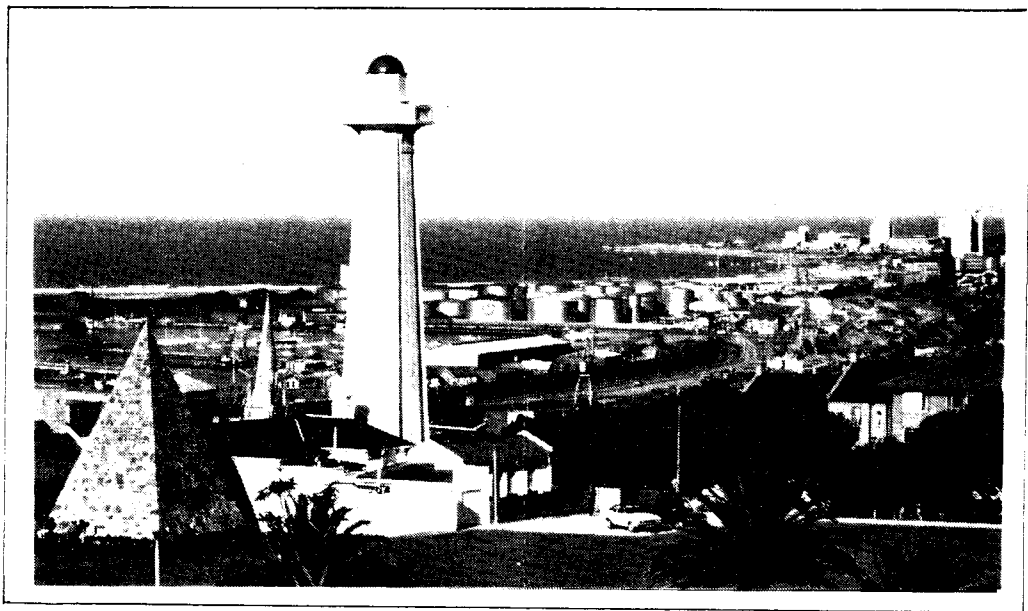




Q S X
P E



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

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NOTICE OF MEETING

The April monthly general meeting of the Branch will be held on Friday, 19th April, 1991, at St. Martin's Church, Kabega Park, starting at 20:15 (8.15pm).

After tea, OM Al, ZS2U, will give a few tips on direction finding and tell us about some of his more interesting - and perhaps exasperating - experiences during DF hunts.

Bring the family. Maybe they'll help you win the next DF hunt.

DXPEDITION TO CISKEI

Al Akers, ZS2U

After much planning and preparation, Owen ZS2AZ and I set off eventually for the Ciskei on Friday morning, 8th March. We reached our destination at about 13:00 and about two hours later we were ready for action. Friday afternoon the weather was beautiful, but Saturday we had a strong, hot, humid easterly wind blowing that made life rather uncomfortable.

Saturday night the wind changed to south-westerly and blew even stronger, right through to Monday morning when it also started to rain. Coupled to this, we also had poor conditions. This was too much, so we decided to pack up and come home.

Nonetheless, we did manage to make 125 contacts and enjoy ourselves sufficiently to want to go again some time. Owen found the operation particularly rewarding, as it was his first experience of DXpedition operation.

We had the pleasure of a visit on Sunday afternoon by Phil, ZS2PP and his XYL Pam from Port Alfred. We enjoyed having a chat with them, as well as some goodies they brought along with them.

It seems that there must always be something that goes wrong. I wish Murphy would take holidays like the rest of us. Fortunately, nothing too serious happened. Owen's tent blew down Saturday; the timepiece developed a dirty contact on the batteries; the extension speaker lead and a fitting for the top of one mast was left at home; Yours Truly forgot to take towels with. Also, on one of his hikes he nearly tramped on a snake. I do not know who got the biggest fright. A horse walked into one of the antennas, but fortunafely did not pull it down.

Some 22 countries were worked on all six continents. Note, you morse haters: due to poor conditions, 92 percent of the DX worked was on CW!

MINUTES OF GENERAL MEETING OF THE PORT ELIZABETH BRANCH OF THE SOUTH AFRICAN RADIO LEAGUE HELD AT ST MARTIN'S CHURCH, FORT ELIZABETH ON FRIDAY 15 MARCH 1991

PRESENT: 38 members and visitors

APOLOGIES: per register.

The Chairman welcomed all present.

MINUTES: The minutes of the February meeting had been circulated in QSX-PE and were taken as read; proposed by Waidie ZS2UM and seconded by Colin ZS2CTR.

ARISING: (a) Marge reminded all that the Branch dinner would be at Alfies on 12 April 1991 and cost R18 per person plus GST. Members wishing to participate should let her know by 7 April. (b) Marge reported that the car stickers were very well received at the AGM and she was sure other branches would order some. (c) She said there was unanimous support at the AGM for the proposal by the Naval Cadets to incorporate the Amateur ZU syllabus into their training. (d) Arrangements for an amateur station at the Bathurst Show were well in hand and it would also be attended by some East London members, which presented an ideal opportunity to get together.

FINANCE: The Branch has a healthy balance of R4217,59.

CORRESPONDENCE: ZS6JQ wrote to say he enjoyed the Hamnet Stimulated Emergency Contest and felt it is the best event on the SA Ham calendar. Charles Thwaites, ex ZS2PA, wrote to furnish his new QTH and call sign, ZS6BUC. Andy Smith, ex ZS6EQ, now sports the call sign ZS1AM, having moved to Parow North.

GENERAL: (a) Marge presented a certificate from HQ to Bud ZS2CA as the highest-scoring ZS2 station in the 1990 Phone contest. (b) Vic ZS2UM said he had not yet got all the bits and pieces together for the direct conversion receiver. (c) It was suggested that a sub-committee be formed to handle and reports on intruders in our bands. (d) Marge sketched the plans for SARRL co-operation with the Post Office for handling interference complaints.

Marge then gave an account of the proceedings at the AGM, saying that the atmosphere this year was very different to last year. Many Councillors were very complimentary about our Branch and some senior Councillors were aghast when she described the ungentlemanly treatment she had received from certain councillors last year. Had she reported it to them then, they said, they would have severely reprimanded the individuals. The AGM was held in the middle of Hillbrow and getting there was an experience in itself. The exhibitions were very well attended by both the public and hams and a good deal of interest was shown by students.

Minutes of Meeting (cont'd)

The AGM was concluded by lunchtime. Marge felt satisfied that HQ are working very hard for the benefit of Ham Radio. She said only 25 members of our Branch had submitted votes for the election of councillors. East London Branch, which Marge represented as Proxy, felt that an up-to-date print of the Constitution was long overdue and HQ would soon provide a new print in loose-leaf form. The binder would also accommodate reprints of the VHF Repeater Guide and other information and guidelines. HQ are arranging the production professionally of a video to publicise amateur radio.

Regarding the RAE, the PMG would not provide past examination papers for publication for training purposes, nor could a League member be appointed to adjudicate at the exam, as requested by EL Branch. The PMG intends, however, to scrap interference as a compulsory question and the questions in general will have a more practical flavour. We are still awaiting instructions promised by HQ about Branch members taking candidates for the 12 wpm CW test.

Waldie pointed out that the increase in our subscriptions was higher than the inflation rate. This was regarded as bad in principle. Garth ZS2HB asked why members were not informed beforehand of the intention to create an important and costly post (R3000 a month in salary alone) and why the post itself was not advertised to give all - perhaps more needy - members an opportunity to apply for it. Fred ZS2EQ said the appointment was against our whole constitution. It was unthinkable that a paid employee, subordinate to Council, should at the same time be its head and preside over the representatives appointed by his employers.

Marge said HQ had asked Branches to observe the celebration of Marconi Day and the 200th anniversary of Samuel Morse's birth on 27 April 1991. 1992 would be International Space Year. She asked for, and received, ratification of her offer to host the 1994 AGM in Port Elizabeth. It would be held in Cape Town in 1992 and in Pretoria in 1993.

Various suggestions were offered about the discussion of AGM motions for briefing our delegate in future but it was pointed out that the present system complies with the Constitution and is the proper way to do it.

After tea, Wolf ZS2WG again won the R30 draw. Thereafter, a quiz conducted by Marge ZS2OB and Lynne ZS2MM gave rise to such hilarity that Keeping score was a mere formality.

CHAIRMAN

SECRETARY

HAMNET NEWS

Al Akers, ZS2U : Regional Co-ordinator, Hamnet East Cape

Military Amateur Stations

Some amateurs may wonder what the position is with regard to the operation of military amateur stations by unlicensed personnel, especially during an emergency. There has even been some controversy over this in the past. The call signs referred to, in the Port Elizabeth area for example, are:

ZS2FG Officer Commanding, Eastern Province Command
ZS2GG Officer Commanding, SA Naval Reserve
ZS2GM 6th SA Battalion.

Personnel who are in possession of an amateur radio licence may, of course, operate these stations in the normal way. Unlicensed personnel may normally only monitor the amateur bands. In an emergency, however, they are allowed to handle emergency traffic only.

Any queries in this connection may be addressed to Ken, ZS2OC, or to me.

HAMNET E.C. MEMBERS

We gave the names of Hamnet's Eastern Cape office bearers last month and intended to provide the names and contact addresses of all members in the region this month. However, OM Al says names and call signs only will suffice. Here then, for completeness, is a full list of the office bearers (again) and current members of Hamnet East Cape.

HAMNET COMMITTEE

REGIONAL CO-ORDINATOR:	A.F.A. Akers	ZS2U
SECRETARY:	H.J. Voortman	ZS2CA
COMMITTEE MEMBERS:	K.R. Victor	ZS2OC
	J.C.L. Moolman	ZS2KU
	J.C.A. Carr	ZS2C

HAMNET LIAISON OFFICERS

ALIQUA NORTH:	B.H. Gold	ZS2EB
EAST LONDON:	W.H. Rivers	ZS2ELL
HUMANSDORP:	A. van der Merwe	ZS2JC
KING WILLIAM'S TOWN:	L.R.L. King	ZS2BZ
MOLTENO:	J.L. Botha	ZS2NH
QUEENSTOWN:	N.C. Holmes	ZS2AI

OTHER MEMBERS

Mrs. J.C. Akers ZS2W	Dr. G.M. Middleton ZS2KG
W.M. Bartie ZS2JM	P.L. Olivier ZS2SZ
M.C. Bosch ZS2FM	K.F. Pautz ZS2FW
B. du Plooy ZS2AK	E. Schadt ZS2EF
L.S. Erasmus ZS4CX	P.L. Smith ZS2OE
G.B. Fennell ZS2DT	P. Tomlinson ZS2OF
C.C. Fife ZS2RT	I.P. van Heerden ZS2BX
G. Glasgow ZS2CO	Mrs. M. Victor ZS2-263
A. Gray ZS2G	I.D. Viljoen ZS2ID
R.B. Gwillt ZS2RL	J.C. Vorster ZS2BE
E.B. Keeton ZS2OK	

MORSE & MARCONI: Forefathers of Ham Radio

Saturday, 27 April 1991 is the 200th anniversary of the birth of Samuel F.B. Morse. Guglielmo Marconi was born on 25 April 1874, and it was on 12 December 1901, i.e. 90 years ago this year, that he bridged the Atlantic Ocean with wireless signals. We will pause to remember both of these famous gentlemen on 27 April, when special-event stations and activities will be arranged throughout the world. Our thanks to OM Mike Smuts, ZS2XE, for the Marconi article from CQ, December 1961, reproduced in Radio 25 in 1972, on which most of the following story is based. Other material was gleaned from various sources. The two smaller photographs were among those taken by Mike during a visit to Marconi's birthplace.

Samuel Finley Breese Morse (1791-1872) is credited with the invention of the electric telegraph. Although he thought his idea of using electric current to transmit messages was original, the idea had in fact also been mooted by several persons, both in the United States and in Europe. In 1837, however, Morse got the first practical electric telegraph 'up and running'. The most important feature of his system was the use of an electromagnet at the receiving end, energized by closing and opening the circuit at the transmitting end. This moved a pen which reproduced the signals on a paper tape drawn by a clockwork motor - shades of the Post Office inker that would be used years later for reception and, much later, for testing candidates for ham licences!

Among the electric telegraphs invented in Europe up to this time, one, as early as 1774, had used frictional electricity to cause pith balls suspended at the end of wires to deflect under the effect of a magnetic field. Each ball was associated with a separate wire representing a letter of the alphabet. An operator had to watch for the movement of the balls and jot down the relevant letters. Another system, invented in 1815, used synchronised rotating discs at the ends of the circuit. A notch exposed, in turn, each of the letters printed on a card below the disc. Again, a pith ball's movement signalled the operator to write down the character that was visible at that instant.

One can hardly imagine a viable telegraph system operating on principles such as these, but real development had to await the invention of a practical source of electric current. In 1800, Alessandro Volta invented his voltaic pile but it took another 19 years for Oersted to find that a magnetized needle could be deflected by current in a wire placed close to it. The following year, 1820, Johann Schweigger discovered that a coil of wire made the needle more sensitive, and this led to the development of the "needle telegraph" in Europe. Further variations on the theme pointed the way to the electromagnet, and it was Samuel Morse who, in 1835, first used

the battery and electromagnet to construct his very viable electric telegraph, the principles of which are still in use throughout the world today, practically unchanged in essence 200 years after his birth.

Morse struggled for the next six years to secure State backing for the development of his system and, in 1843, the Government commissioned him to erect an experimental telegraph line between Washington and Baltimore. On 24 May, 1844, the now famous message "What hath God wrought" was flashed over a distance of 64 km between the two cities.

In 1884, Morse's colleague Alfred Vail, found that he could read the morse signals simply by listening to the rattling of the electromagnet and that the inking pen could be dispensed with. Thus, aural decoding by means of the "sounder" was born and would be used in telegraph offices throughout the world well into the second half of the 1900s.

A slight improvement converted the electromagnet into a relay, enabling signals to be transmitted over longer distances using booster batteries along the route to overcome losses due to resistance of the lines.

The code that we use today is a far cry from Samuel Morse's original system of sounds separated by spaces of differing lengths. "C", for example, was two dots, a pause and another dot. "R" was the reverse: a dot, a pause and two dots. Although the idea was undoubtedly his, it has been said that a helper, and not Morse himself, actually compiled the code, being guided by the number of pieces of type found in a printer's tray and allocating the shorter code combinations to the letters used most frequently.

Be that as it may, an international convention in 1851 simplified the code, dropping the variable spaces between elements of the same letter, and the code adopted is the official International Morse Code used today, albeit with some variations at times, both intentional and unintentional. If memory serves me correctly, it is designated by the ITU as the International Telegraph Alphabet No. 2.

Marconi

On 25 April, 1874, Guglielmo Marconi was born at Marzabotto, Italy. He was educated by private tutors in Italy and England. He was fascinated by the experiments of Heinrich Hertz in generating and detecting electromagnetic waves in the laboratory. Marconi's thoughts turned to transmitting messages through space and he never dreamed that no one else had apparently thought of such an elementary and logical extension of Hertz's work.

He duplicated Hertz's equipment, constructing an 'electromagnetic wave generator' (i.e. a transmitter) consisting of an induction coil wired to a spherical spark gap. He added a simple morse key and thus was able to interrupt the transmission using morse code. His receiver was a spark-gap detector located several hundred metres away - the furthest that Hertzian waves had been detected, but Marconi realised that the distance would have to be increased vastly if wireless communication was to be of any practical value.

He discarded Hertz's antenna consisting of short rods connected to the terminals of the spark-gap and a parabola-shaped reflector and devised his own antenna, which immediately improved the range. Marconi's antenna consisted of a copper cylinder on top of a mast and a rod buried in the ground. Each element was connected to one of the spark-gap terminals. He found that elevating an antenna high above ground improved matters considerably. This configuration - an elevated element and a ground termination - became known as the Marconi antenna and was, in fact, his first original contribution to radio. He also discovered the benefits of placing a reflector behind the driven element, thereby inventing the 'beam' antenna.

Realizing that his spark-gap receiver was too insensitive for reception over great distances, Marconi experimented with a new type of detector using iron filings - an invention of Sir Oliver Lodge. However, he soon improved on this and, using nickle and silver filings in an evacuated tube, his 'coherer' extended the range of his equipment in 1896 to about three kilometres between his house and a hill, and even down the far side of the hill, showing that the signals could pass through obstacles.

Lacking support from his own government, Marconi moved to England, where he busied himself with the development of a ship-to-shore wireless system, which he saw as a prime area of application. Still in 1896, he spanned a distance of about 14 km across the Bristol Channel. Later the same year he was granted British Patent No. 7777 for his wireless system.

Marconi won a prize amounting to 60 000 pounds that had been offered by the Admiralty when he successfully established wireless communication between Queen Victoria, on the Isle of Wight, and the Prince of Wales on board the Royal Yacht several kilometres out in the Solent. Adapting the Marconi antenna, he had run a wire up the ship's mast and used the vessel's metalwork and the sea for the ground element. In 1899, wireless was used for the first time to secure help for a ship in distress.

Marconi dreamed of a network of land stations on both sides of the Atlantic to maintain communication with ships plying the ocean. Many eminent

scientists of the day, however, insisted that it was impossible. Radio waves, they maintained, travel in straight lines like light waves and, consequently, the range was limited to the horizon. Beyond that, the waves would continue out into space and be lost. Nevertheless, Marconi decided that it was worth a try and set up a transmitting station at Poldhu Point, near Land's End in the south-western corner of England.

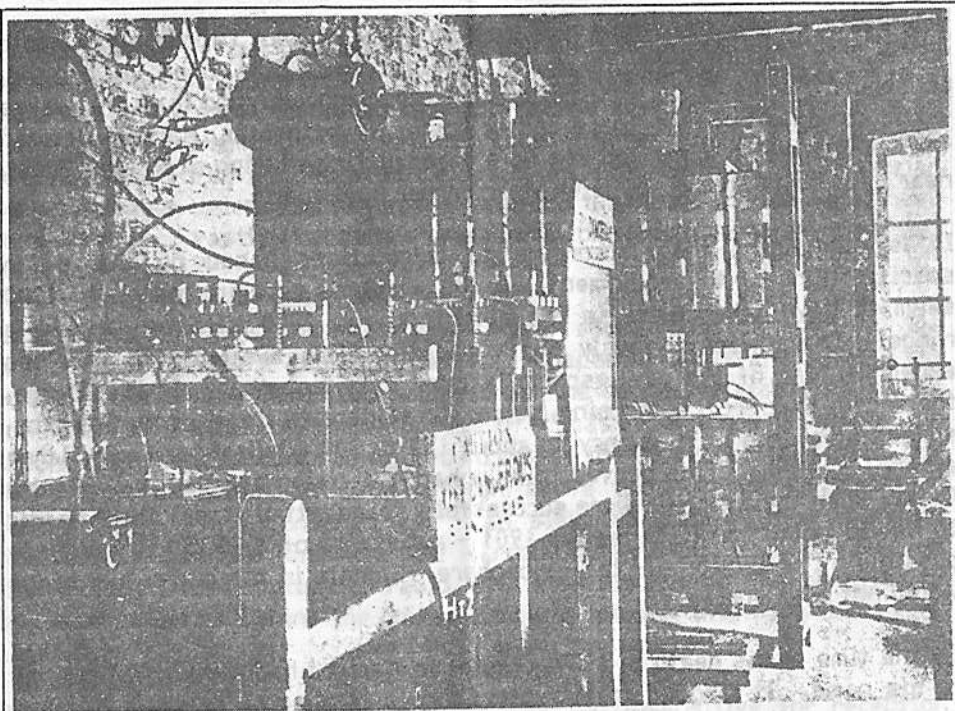
It is significant that, according to calculations based on the known specifications of the equipment, all the wireless experiments up to 1900 seem to have taken place in the gigahertz, i.e. 1000 MHz, or microwave range! There was obviously no propagation data available to wireless experimenters of the day, especially over long distances. It is strange, therefore, that Prof. K. Fleming, scientific advisor to the Marconi Company, suggested a drop in frequency to about 150 to 300 kilohertz and very large antenna systems. This proved to be a happy decision because, as we know today, when their signals were successfully transmitted across the Atlantic to Newfoundland on 12 December 1901 - a distance of 3360 km, it was made possible by reflection off the ionosphere. Signals in the microwave range would not have succeeded.

By the time of his death in 1937, Guglielmo Marconi had a string of credits to his name. It is good to know that, for a number of years, he rubbed shoulders with amateurs in pioneering the use, for long-distance communication, of the high frequencies, said by the 'experts' to be 'useless'.



The house in Bologna, Italy, where Marconi was born. The plaque commemorating his birth can be seen on the facade.

P.S.- The little Fiat Cub (lower left) brings back fond memories to the Editor. He ran his first mobile rig - 4 watts AM - back in the '50s from a bug like that with a 3,7 metre antenna on the back. Compare the car's size with the scooter passing behind it.



The transmitter at Poldhu, England with which the first wireless signal was transmitted across the Atlantic on December 12, 1901. The power of the transmitter was about 10 kilowatts. It was designed by J.A. Fleming and Marconi. (Photo: Marconi's Wireless Telegraph Co. Ltd.)



This is on the farm of Marconi's father near Bologna, Italy, where the young radio pioneer conducted his experiments. The mausoleum where Marconi's sarcophagus rests is in the foreground, below the house.

Return of Foxy Rugz



It's only natural that you were distressed by the omission of the Foxy Rugz column from last month's QSX-PE. Not surprisingly, we were inundated with letters of complaint from readers. Both writers were highly indignant and in mine I suggested that the dropping of the popular column was surely a unilateral decision of someone in a position of power, probably punchdrunk with professionalism. There were also a couple of dozen letters commending the dropping (such as the one at the foot of this page), but the writers are obviously ignorant of the true facts. In any case, you can't please all the people all the time.

We have not yet reached an accord with Foxy on remuneration for a monthly column in QSX-PE. Events have taken a new turn with Foxy demanding to write under the title "The General Manager Finkf" (Foxy fpeakf wif a lifp). It seems he got this grandiose idea when he went to see his Auntie and was reminded of his right regal origins on The Gulf. They date back to the days when sabre-rattling middle-east countries fought with scimitars instead of Scuds. Their soldiers dressed in colourful plus-fours and little gumboots and rode loudly-objecting camels. ICBM stood for "Irritable Camels Belching Malodourously". In an effort to keep upwind of the odour, soldiers tried galloping in reverse, but they found that both ends of a camel smell about the same, and that's when they took to draping those lappies across their faces.

Anyhow, the Rugz family left EP-1 land when, at the request of the IARU, it stopped using the name "Persia". Thus, you see, Foxy is one of the genuine Persian Rugz. His clan is an off-cut from a larger family of which his Auntie is a direct descendant and whose surname, by a strange coincidence, is Karpetz. (There are other, smaller branches. One still works for HMV but just hasn't clicked with the customers). Foxy's Auntie traces her ancestry back to the Three Wise Men, or Magi, so she is one of the Magi Karpetz, in honour of which she goes by the name "Maggie". Having fled Persia, the family became known as the "fleeing Karpetz", corrupted later to "flying Karpetz".

Armed with this intimate knowledge of Foxy's fantastic fleeing or flying family you will be better able to appreciate his erudite essays once we reach rapport apropos the pressing problem of a proper pay packet for the popular Persian and the pertinent policy point appertaining to the appropriateness of appointing, as a precedent, a pensionable patriarch to an unpublicised superior position on your pet paper's company of paid personnel. Now, as you wipe up the spit, I'll prepare another gripping epistle for the prime page of the next print of this premier periodical.

Letter to the Editor (genuine!)

LYNNE O'LEUM, allegedly of Carpet House, Bokhara Street, Wolwefontein writes:

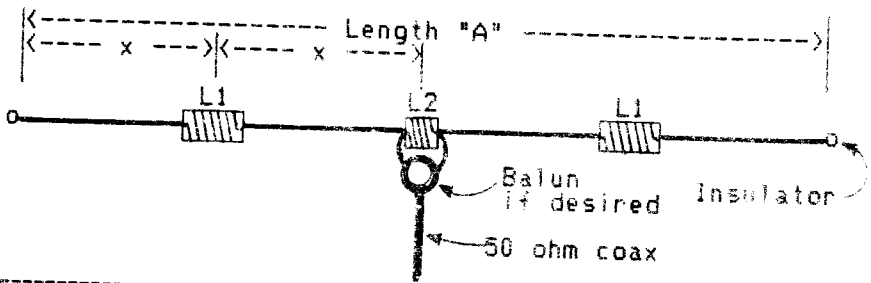
"Being an avid reader of local Amateur Radio publications for some years now, I cannot help commenting on certain columns which appear to be sinking lower and lower. In fact, they have now reached floor level. For some time we have been subjected to Mat(z) and of late have got down to Rug(z) height - or lack thereof. I've heard of scraping the barrel, but getting down to just covering the floor is too much. Hopefully it won't sink to grass roots level. Can we in fact do worse? Perhaps only if I write for you."

Asked to comment, Foxy writes: "Yes and no." Oddly enough, I learned the art of writing from Lynne O'Leum's own uncle, known because of his amazing CW dexterity as "Morse" O'Leum. His subjects never rose above grass roots level."

TWO-BAND SHORT DIPOLE

This antenna was described in Radio 2S, October 1983. OM Jack, ZS2CI, has been experimenting with it and the results have been very satisfying. Although comparative tests sometimes give Jack's standard antenna the edge, reports just as often favour the shortened one. Quite often no difference in signal strength is detected, or different stations in a net will give contradictory reports. Distance and direction perhaps play a part. Whatever it may be, this looks like a handy antenna to take along on rallies, camping holidays etc.

Decide on the pair of adjacent bands in the table below for which you wish to construct the antenna and use the data specified for the lower-frequency one of the two.



Freq.	DIPOLE ELEMENTS			COIL L1				COIL L2			
	Length "A" (m)	Length x	Ant Wire (mm)	uH	Turns	Coil Length (mm)	Wire Dia (mm)	uH	Turns	Coil Length (mm)	Wire Dia (mm)
1,840	38,76	9,69	1,2	93,02	290,8	349	1,2	3,81	14,3	12	0,8
3,650	19,54	4,89	1,0	44,1	99,9	80	0,8	1,9	9,1	8	0,8
7,050	10,12	2,53	1,0	20,96	52,1	42	0,8	0,99	5,9	5	0,8
10,120	7,05	1,76	1,0	13,85	37,1	30	0,8	0,69	4,8	4	0,8
14,200	5,05	1,26	1,0	9,4	27,0	22	0,8	0,49	4,0	4	0,8
18,300	3,9	0,96	1,0	7,1	22,0	18	0,8	0,39	3,4	3	0,8

Coils L1 and L2 are wound on 20mm dia PVC tubing.



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SOLID STATE RELAYS

Ken Victor, ZS20C

In recent times, relays have been named as the cause of noise, both mechanical and electrical. So, the solid state developers have been working on making a solid state relay and come up with a few different working models.

In the modern Solid State Relay (SSR) there is commonly less than 11 pF of input-to-output coupling capacitance and no magnetic coupling, so no noise gets from the power circuitry to the signal level circuitry. They make them with zero-voltage turn-on and off and this stops any RF type noise. If you compare this with the relays that we have used up till now, the contacts almost always have a little spark and this always gives out a bit of RF noise. There is no bouncing of contacts and no mechanical wear or pitting of contacts with a SSR. Another advantage is that there could be an immense amount of vibration which could damage an ordinary relay, but the SSR doesn't mind a bit.

To operate the SSR you typically need a few milliwatts, enough to energise a LED! This can normally be supplied by TTL or CMOS circuits which work in milliamperes. Most electro-mechanical, power relays need a few watts to switch them on. If you look at reed relays, they don't need much power to switch them, but then you have the possible problem of magnetic coupling, particularly if you have them close together.

So, what goes on inside these SSRs?

There are a few distinctly different components inside the solid block that usually has only four or five connections onto it. Firstly there is an optical coupler system that has a LED that puts light onto some Photo Voltaic cells. These PV cells generate enough electrical power to energise a SCR or TRIAC or MOSFET, which then switches on. The isolation between the control-signal and the controlled power circuit will be in the order of a few thousand volts.

What about practicalities? SSRs are available to switch as little as a millivolt to over 450 volts and from a milliampere to over 300 Amps. A common SSR you might use would cost R52.00 today and could handle 280 VAC and three amps, and be controlled by anything from three to 32 volts DC. A larger one might cost R375.00 and be able to handle 480 Volts AC at 90 Amps, with the same control voltage requirement, 3-32 VDC.

Incidentally, they switch from DC to RF. There are no worries about having to put a diode across an inductive load to be switched and they normally operate in about a quarter of a millisecond. Life is about ten times that of a mechanical relay.

Before you go out and buy one, take a look at its properties. Make sure it will do what you want. There are many different designs.

Hope this helps keep you up to date. 73

Calibrating your Digital Readout

When accurately calibrating your digital readout against WWV, it is not sufficient to simply tune to what you think is zero beat - your RX (and maybe even your ear) probably doesn't reproduce tones much below 100 Hz, so you can only guess where zero point is.

The correct tuning point is where the pips and the announcer's voice do not change pitch when you switch between AM and either LSB or USB, depending on which sideband you are using to calibrate.

When you switch to the SSB mode, the frequency readout should be precisely 10 MHz (at the point where it just changes from 9.999..). Readouts in the AM and other modes might not correspond with those in the SSB modes because of transmitter offset, but ignore this.

Perform the calibration in this manner first with one sideband and then the other. It may be found that the calibration cannot be adjusted accurately on both LSB and USB. If this is the case, calibrate to favour the sideband that is more important to you and make due allowance for the error when reading your frequency on the other sideband. Alternatively, accept a compromise adjustment or check the handbook for realigning your dials.

THIS & THAT

The good news is that ZR licensees may now write the 5 wpm morse test and get a ZU licence in addition to the ZR one. This will permit them to use phone (20W PEP) on ten and 160 metres and get on several HF bands on CW QRP (5W). My advice is to stick to CW and use the opportunity to increase your CW speed the fun way - while actively enjoying your hobby. Before you know it you'll be doing 12 wpm and getting your ZS ticket. Pushing a mike button is nothing new to you, but working distant stations on QRP is a rewarding challenge.

As this issue goes to press, the Bathurst Show is in full swing. Thanks to the initiative and hard work of Phil Hopper, ZS2PP and John Hugo, ZS2J, Amateur Radio is getting a good boost at this popular annual event. When I contacted the special station operating under the Branch call sign ZS2PE, they had two rigs going simultaneously. Thanks to Phil and John, and their enthusiastic helpers, some of whom travelled long distances to support them.

By the time you receive this it will probably be too late to ask Marge, if you haven't already done so, to reserve a seat for you at the Branch's Christmas Dinner, which is being held at Alfies on Friday, 12 April. (This year, yes! Why do you ask?). R18 a head + GST is very reasonable and those who can remember what happened at previous such functions will tell you how much fun they are. 7.30 for 8.00 pm.

Lynne ZS2MM is looking forward to her visit to Europe in August. Now is the time for all good hams to prepare their lists of things they want Lynne to bring back for them.

DON'T FORGET THE TUESDAY NATTER NET

Remember to join us on the Town repeater (145,050/650 MHz) at 19:30 (7.30 pm) on Tuesdays for a general natter. This is also your opportunity to seek advice, look for equipment or offer your surplus gear for swops.

* * PERSONAL NEWS * *

Congratulations to those who will be celebrating:

Birthdays - April: Alan Bowles ZR2BL, Doris Edwards ZS2DJ and Marge van Loggerenberg (ZS2LR) (all on 22nd); Colin Robertson ZS2CTR (23rd); Arthur Edwards (ZS2DJ) (24th); Toff Scarr ZS2AAW (28th). **May:** Marge Weller ZS2OB (1st); Wim van Vorstenbosch ZS2WV (6th); Sean Allen ZS2SNA and Langley Lookwhy ZS6BGN (9th); Attie Barnard ZR2DY (10th); Shirley Cockbain (ZS2TC) (11th); Dot Plumridge (ZS2VP) (16th).

Anniversaries - April: Hanni and Gerhard Baum ZS2UM (29th). **May:** Werner and Rene Ahlers ZS2WA (1st); Shirley and Gus Winter ZS2MC (2nd); Anne and Jock Morris ZS2MD (16th).

to all who helped keep ZS2PE/P on the throne once again in the Field Day contest, operating from a caravan parked in the suburbs and nary a portapottie in sight! Won't let on about our secret weapons will we, Marge and Lynne?

to Bud Voortman, ZS2CA, on being top ZS2 scorer and ninth overall in the 1990 SARL HF Phone contest, for which he was presented with a certificate from HQ; also to Vic Olivier, ZS2SZ who, operating as ZS2PE, chalked up one point less than Bud; and to Lynne, ZS2MM, who was only three places behind Bud. Bud, operating ZS2PE, was also top ZS2 scorer in the CW contest and third overall, with Vic, ZS2SZ again a creditable 10th place overall.

Welcome to Graham, ZR2GG, who is transferring to the PE Branch, having moved here from the Transvaal a few months ago. Good to have you with us, Graham.

to Merv Akers, ZS2F, who has returned to PE after a spell in the Transvaal.

Who goes Where? OM Charles Thwaites, ZS2PA, now holds the call ZS6BUC, having moved to Randburg a few months ago. Andy Smit, ZS6EQ, promptly up and left the Transvaal and is now ZSIAM located in Parow North.

You lost out Nobody spotted the deliberate error last month. We drew attention to the Editor's "new address and telephone number" but gave the new address only. Consequently, nobody wins the prize of twentyfive R50 tickets in the 1-chance-in-25 competition to win something that, if you can afford R50 for a ticket, you probably already have two of. Oh yes - the Editor's telephone number is 38-1101.

PORT ELIZABETH BRANCH COMMITTEE

CHAIRMAN	Marge Weller	ZS20B	30-4597
VICE CHAIRMAN	Lionel Coombe-		
	Davis	ZS2DD	32-1770
SECRETARY	Lynne Crothall	ZS2MM	35-4671
TREASURER	Colin Robertson	ZS2CTR	30-0570
SOCIAL	Marge Weller	ZS20B	30-4597
SPECIAL EVENTS, AWARDS, CONTESTS	Bud Voortman	ZS2CA	34-2770
HAMNET	Al Akers	ZS2U	30-2983
PROJECTS, PUBLICITY, NOVICE LICENCES	Viv Moore	ZS2VM	30-4433
EDITOR: QSX-PE	Garth Laaks	ZS2HB	33-1532
QSX COMMITTEE MEMBER	Viv Moore	ZS2VM	30-4433
LIBRARIAN, DF HUNTS, IPHA	Vic Olivier	ZS2SZ	30-2440
PROJECTS, PUBLICITY	Viv Moore	ZS2VM	30-4433
PACKET WORKING GROUP CO-ORDINATOR	Lionel Coombe-		
	Davis	ZS2DD	32-1770
REPEATER WORKING GROUP CO-ORDINATOR	Trevor Scarr	ZS2AE	32-1746

BULLETIN ROSTER

Bulletin readers please refer to your roster sheet.

SUNDAY BULLETINS

Bulletins are transmitted on Sundays at about 08:40
(after the Headquarters bulletin) on -
7,098 MHz (40 metre band SSB)
145,100 MHz (2 metre band FM - Lady's Slipper)
50,005 MHz (automatic link with 2 m Lady's Slipper)
14,130 MHz (20 metres SSB) when conditions require.

BRANCH VHF SERVICES

Town Repeater (PE Central)	145,050	/	145,650 MHz
Grahamstown Repeater	145,150	/	145,750 MHz
Lady's Slipper Repeater	145,100	/	145,700 MHz
6 Metre link with Lady's Slipper ..	51,400 MHz		(simplex)
Cockscomb Repeater	145,000	/	145,600 MHz
Karreedouw Repeater	145,075	/	145,675 MHz
University Repeater	145,175	/	145,775 MHz
6 metre beacon (ZS2SIX CW ID)	50,005 MHz		
2 metre beacon (ZS2PE CW ID)	144,910 MHz		

BRANCH MEETINGS

20:15 (8.15pm) on the third Friday of the month at St. Martin's Presbyterian Church, Great West Way, Kabega Park.

**** We like being your branch ****