

**Q S X**  
**P E**

*Port Elizabeth Branch of the  
South African Radio League*

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



National Call	145.5 Mhz
P.E. Repeater	145.05/65
Grahamstown	145.15/75
Lady's Slipper	145.10/70

**ZS2PE**

**Bulletin: Sunday 08h40**  
**HF: 40m — 7098 KHz**  
**VHF: FM-145,700 MHz**



# Port Elizabeth Branch

## <NOTICE OF MONTHLY MEETING>

THE MONTHLY MEETING OF THE PORT ELIZABETH BRANCH WILL BE HELD AT THE Y.M.C.A., HAVELOCK STREET, PORT ELIZABETH ON FRIDAY 18th NOVEMBER, 1983 AT 8p.m. THIS IS THE LAST MEETING OF THE YEAR AS THE CHRISTMAS PARTY TAKE PLACE IN DECEMBER.

### \*\*\*\*\* Committee

CHAIRMAN:	Dick ZS2RS (322111)	VICE CHAIRMAN:	Trevor ZS2AB (321746)
SECRETARY:	Marge ZS2OB (303498)	TREASURER:	Brian ZS2AB (303498)
PROJECTS:	Lionel ZS2DD (321770)	SPECIAL EVENTS:	Colin ZS2AO (312471)
P.R.O.:	Pete ZS2PJ (301493)	AWARDS:	Attie ZR2DY (325449)

QX-PE - ZS2OB and ZS2AB.

### \*\*\*\*\* NEWS

**Welcome** On behalf of the Committee and members we would like to extend a hearty welcome to Jan van Ree ZS3JR who has settled in Port Elizabeth and transferred his membership to the Port Elizabeth Branch. We wish you a long and happy association with the Branch.

**CONGRATULATIONS:** Once again to Percy Buckley ZS2RM for his achievement in the S.A.R.L. CW Contest, being placed first in the Veteran Section. Also to Mike Robertson whose daughter Lynn got married this month. To Kevin Eastwood ZS2KE who has completed his time on cw and has permission to operate phone. Pete ZS2PJ has worked more than 200 cw contacts and has sent off his application for phone as well. Well done!

**PERMANENT LOAFERS CLUB:** We hear that Ron Levy ZS2Q has finally, finally joined the P.L.C. and will be able to spend more time in the shack and around the home. Jeff Bowes-Taylor ZS2TJ of East London has at last managed to pack up and has moved down to Cape Town where he will be using his old call-sign of ZS1VS. Hope you settle down soon and find a suitable QTH Jeff.

**ROVERS ASSOCIATION:** Nothing to do with motor cars, but our P.R.O. Pete Smith ZS2PJ is off to Germany and England on business for two weeks and will also spend a week with his family in Oxford. Happy landings, Pete.

**CONSTRUCTION PROJECTS:** The grapevine has it that several members are busy on projects at the moment, with Lionel Coombe-Davis ZS2DD working on his 432 MHz transverter and Pete ZS2PJ building a G.D.O. Basil Gibson ZS2PG has been preparing special antenna systems in order to contact the first ham in space and Dick Schönborn ZS2RS is still preparing to get his beam up on the tower. Ron Clarke ZS2MF has his tower up and is waiting for favourable weather to get the beam on top. Trevor ZS2AE and Christopher ZR2EY, both Scarr, are hard at work ironing out the last bugs on the repeater proposed for the Cockscomb. Brian Weller ZS2AB has developed the software and hardware for his computer in order to be able to run his satellite station automatically and Marge ZS2OB is trying to talk him into using it to run the garden sprinkler system automatically as well, also, too!

**GRAHAMSTOWN REPEATER:** On Sunday 30th October, Dick ZS2RS, Lionel ZS2DD, Trevor ZS2AE and Julie, Pete ZS2PJ and family, Clive Fife ZS2RT and family Brian ZS2AB and Marge ZS2OB made a trip to replace the overhauled repeater and renew guy wires, assisted by Barry ZR2DN from Grahamstown. All was well, until the repeater suddenly went silent key and a further trip will have to be made to investigate the problem.

# Forthcoming Events

H.F. FIELD DAY: 19th November at the open space at the end of Walker Drive above Sherwood. Time of operation from 10a.m. till midnight but helpers are requested from 8a.m. in order to help with the erection of antennas, etc. Please contact Marge ZS2OB 303498 if you can help for even half an hour, so we can draw up a list.

CHILDREN'S CHRISTMAS PARTY: This has been arranged for Sunday 4th December at the Wyndomayne Tea Gardens on the Seaview Road from the turn-off at Greenbushes. Time of Starting 3p.m. until 5p.m. Sweets, cooldrinks, etc are being provided for the kiddies by the Branch and any adults who wish to have tea, etc the cost is R1.50 each. Parents are asked to provide gifts for the children not exceeding R5 in value each. Please mark these gifts with the child's name and they will be given out at the party. Please contact Marge on 303498 if you have not already given the details to Pete ZS2PJ, who will be away for 3 weeks.

BRANCH CHRISTMAS PARTY: This will take place at the QTH of Trevor ZS2AE at 14 Kitching Road, Charlo on Saturday 10th December at 8p.m. The cost is R12 per couple or R6 each. There will be a disco available for those who wish to dance and there is also a pool if the weather is kind to us. Please bring your costumes!! Once again contact Marge at 303498 if you wish to attend, so that catering arrangements can be made.

A.G.M. WORKING GROUP: A meeting of all those who volunteered to help out with the arrangements for the 1984 A.G.M. is being held on Friday 25th November at 8p.m. at the Scout Hall, in Sunridge Park. Anyone else who is willing to offer their services, please turn up as well. All final details will be given on bulletins.

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## Hamnet News

Regional Co-Ordinator Election.

<u>Nominee.</u>	<u>Proposer.</u>	<u>Second.</u>
Al ZS2U	Dick ZS2RS	Lionel ZS2DD
Al ZS2U	Fred ZS2JS	Ken ZS2OC
Ray ZS2RE	E.L. Branch	E.L. Branch

Ray however, declined the nomination and therefore Al ZS2U becomes the elected Regional Co-Ordinator for the Eastern Cape.

General: It is difficult to write a news column if you do not know what readers consider as news, useful news, that is. It is difficult to find out, unless readers communicate their problems, queries, etc. to you. So it was good to hear from people like Pieter ZS2OQ, Tiny ZS2GN, George ZS2KG, Brian ZS2EB and others. Something else that is very much appreciated is the members who regularly report into the nets. Here first prize must surely go to Van ZS2JC who is the most consistent member who reports into the 80m net. He has only missed once when he was away on holiday. It is also pleasing too to note that members from other Divisions also report in, especially from Div. 6.

The 6m net has been going well for sometime and here the honours must go to Hannes ZS2BE. He took over the running of the net from Ken ZS2OC and still provides the service, even at the expense of receiving a speeding ticket for speeding from Church to make the net on Sunday evenings!!! A big thank you must go to Mike ZS2FM for the enthusiasm and various ways in which he promotes 6m and Hamnet in the Eastern Cape.

Reprinted from QJA, Algoa Branch.

MINUTES OF THE GENERAL MONTHLY MEETING OF THE PORT ELIZABETH BRANCH OF THE S.A.R.L. HELD AT THE Y.M.C.A., HAVELOCK STREET, PORT ELIZABETH ON FRIDAY 21st OCTOBER 1983.

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PRESENT: 19 members and visitors.

APOLOGIES: ZS2DD, ZS2KX, ZS2LO, ZR2DY, Lynn Crothall and Bill Hodges.

The Chairman welcomed all to the meeting, especially Cliff ZS2AP, Fred ZS2JS, Dave Emmett, Jan ZS3JR, our roving ambassador John ZS2JR and the ladies.

MINUTES: The Minutes of the meeting held 19th August, 1983, having been published and circulated in QSX-PE were taken as read, proposed by Colin ZS2AO and seconded by Trevor ZS2AB.

ARISING: The Chairman read a letter from Al ZS2U regarding the election of Hamnet Regional Co-Ordinator. It was reported that Bette ZS2LO had returned from Cape Town where she had been undergoing treatment and Dick expressed the hope that her treatment was successful and her recovery would be speedy and complete.

CORRES: Letter from Edward Hotel re AGM 1984.  
Letter from ZS2U.  
Council Minutes and Financial Statement.  
Various Branch Newsletters.

FINANCE: Brian ZS2AP the Treasurer reported that 110 subs had been renewed to date, otherwise all was quiet.

GENERAL: Apologies has been received from the printer for the poor quality of the first page of the October issue of QSX-PE. Dick reported that the operation of JOTA during the previous weekend had been very successful and for the first time, SSTV had been used and this provided much interest to the Scouts who though unable to use the mike, had been able to see several Scouts and operators from other stations, including DX. Many thanks to Trevor ZS2TJ for the use of his equipment, to Barry Fennell for the use of his camera, to Colin ZS2AO for his expertise and to all those, too numerous to mention, who had helped with the erection of the antenna and the operating. The P.E. Scout Group had qualified for two awards and it was hoped to expand the SSTV operation next year. It was noted that cw cassettes were available from Brian ZS2AB and a further tape had been obtained from the U.S.A. and this could be copied and made available to those who needed it. There were no plans for the Branch to operate in the VHF/JHF contest.

On November 19th, the National Field Day was to take place, and the Branch would be setting up a station near Sherwood. The intention was to use the same beam as for JOTA and volunteers were needed for operating from 10a.m. till midnight. It would be nice to get non-Committee members involved. Please let the Secretary know if you are available.

Communications had been requested for the Lion Marathon which was to be run shortly and 4 VHF stations were required. Volunteers were asked for and received.

Brian ZS2AB reported that the crystal filter for the Cockscomb repeater had been ordered and was due to arrive any day. A cavity filter for the Town Repeater had been obtained and would be installed to eliminate the qrm.

It was stated by the Chairman that Brian ZS2AP was working on the Grahamstown repeater unit and was in the process of overhauling it completely. This would be installed as soon as possible and it would also be necessary to replace the guy wires and

Minutes. (contd)

check the antenna. This would involve a day's outing, the date of which would be announced on bulletins. Anyone who wished to come along with their families was very welcome. Discussion then took place regarding the formation of the Working Group for the 1984 A.G.M. and the various categories were listed e.g. transport, registration, p.a. system and recording, voting count, casual photographs, official photograph, printing, hotel liaison, bulletins, Friday evening supper, entertainment for wives, etc. The following volunteered their services, ZS3JR, ZS2DK, ZS2AO, Gordon Knapp, Lynn Crothall, ZS2PJ, ZS2AB, ZR2EY, ZS2RT, ZS2GQ, ZS2PG, ZS2OB. Many more volunteers would be needed and a meeting would be held as soon as possible to make further arrangements. Various items were mentioned which had already been obtained and others were also discussed.

There being no further business, the meeting was closed and the Chairman thanked all for their patience and co-operation.

sgd:  
R.W. Schönborn ZS2RS  
Chairman

sgd:  
M.T. Weller ZS2OB  
Secretary.

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## Wise Words

### EXCESSIVE RF FLOATING AROUND IN YOUR SHACK?

This tip has been passed along by Colin ZS2AO who came across it in A5 Magazine. If you suffer from excessive RF inside your shack and this causes you QRM problems on things like tape recorders which you may be trying to operate while you are transmitting, and you have one of the commercial rotators in use, you may find that the RF is being conducted back into the room by the cable from the rotator to its control box. There is usually an 8 core cable from the motor, and the control unit will also probably only be fitted with a 2 wire mains lead. Bypass all cores of the motor cable to the case or chassis of the control box with .01 mfd capacitors, and earth the control box to the mains or other station earth point. You might find that you no longer have a QRM problem.

### STORING YOUR SPARE IC's SAFELY.

It is an established fact that IC's, particularly the CMOS variety are very sensitive to damage by static charges during handling, etc. Storage of a number of different types of IC's in such a way as to be able to read the type numbers easily when you need to can be a bit of a problem. The nice moulded plastic tubes in which most suppliers pack the IC's is fine if all those you have in one tube are the same, you can merely write the type number on the tube. But this is seldom the case, and it is sometimes very difficult to read the numbers through the tube material, so one ends up pouring them all out of the tube and risking static damage in the process. There is a special type of conductive foam available for storage, the IC's merely being pressed into the foam, and this keeps the pins electrically shorted. If you do not have this foam available, but see a nice sheet of the white packing foam lying around, you can utilise it BUT NOT AS IT IS. Select a piece of the foam of a suitable size to accommodate all the IC's you have to store, and then cover the foam with a piece of the SW's aluminium cooking foil and then press the IC's into the foam through the foil. They will be held in place, and you will be able to read the type numbers without handling them at all.

# Construction Project

THE ZS2EA LOGIC TEST PROBE REVISITED.  
BY BRIAN ZS2AR.

The logic probe described in this article was designed by our local digital boffin, Bert ZS2EA probably 7 or 8 years ago, if not more, and was published in QSX-PE at the time. One was constructed at this QTH at that stage and has been in constant use since. There have been many designs of such devices published over the years, but I have yet to see one which is more useful particularly when monitoring a circuit for some event which may not happen when you think it will!! In this respect, the audio indication of the events taking place is the most useful feature ever as you do not have to watch the LED's at all times to see a change. This is a very important consideration in these days of ultra-compact boards with high parts densities, and a possible slip of the test-prod whilst watching the LED's could result in a disastrous repair job. With microprocessors and their allied multi-legged friends crawling into virtually everything we touch nowadays, I felt that many home constructors or repairers might like to do themselves the best favour possible and put one of these probes together.

The circuit shown in Fig. 1 has the facility of indicating four distinct DC levels of voltage. As a result, the probe not only locates definite faults, but also draws attention to points which may be the cause of occasional malfunction. One LED indicates Logic 1 - the voltage tested must be higher than 2,4 volts for this to light. The other LED indicates Logic 0 - the voltage must be less than 0,4 for this to light, but if the push-button (PB1) is pressed it will light provided the voltage is less than 0,8. If the voltage is less than 2,4 but higher than 0,4 or 0,8 according to the push-button state, then both lamps will be off.

If the voltage tested is oscillating, both LED's will be lit, or will flash alternately at low frequencies. If the pin tested is normally at Logic 1 but is subject to an occasional negative pulse, the Logic 1 LED will be lit all the time, and the 0 LED will flash on the occurrence of the pulse. The conditions are reversed for isolated positive pulses. Pulses as short as 10nS are detected and stretched to about 100mS for ease of indicating. The audio facility consists of a unijunction transistor oscillator circuit which has two timing capacitors (0,1 and 0,2 mfd) one of which is selected when one of the LED's is lit. The output of the oscillator is an audio tone, the frequency of which is determined by the capacitor selected by the probe. It is arranged so that the 0,1 mfd is selected when the Logic 1 LED is lit, resulting in a higher frequency tone. When the Logic 0 LED is lit, the larger capacitor is selected and a lower tone frequency will be generated. The tone is fed to a small loudspeaker, or capsule from a cheap tape recorder microphone, and BINGO! - no need to look at the LED's to know what is happening.

Fig. 1 shows the circuit for the complete probe. The 741 op amps (which act as voltage comparators) require a small negative voltage - 2 or 3 volts at 5 mA or less is quite adequate. A couple of penlight cells could be used but the circuit of Fig.2 provides the necessary negative voltage from the 5 volt supply. The total current consumed by the whole probe is about 50 to 70 mA. The power supply can usually be picked up from the circuit under test. To set up the skeleton presets (Vr 1, 2 and 3) use an external potentiometer of about 1K across the 5 volt supply and set the wiper at 2,4 volts with the probe tip and voltmeter connected to the wiper. Adjust VR 1 so the Logic 1 LED just lights. Set the external pot. to 0,8 volts and with the push-button pressed, adjust VR3 so the Logic 0 LED just lights. Set the external pot. to 0,4 volts and adjust VR2 so the Logic 0 LED just lights.

That's all there is to it. Fig 3 shows the decoupling capacitors for the 5 volt supply. These are also built into the probe. Referring to Figs. 1 and 2, the IC's A, B and C are all 7400. The supply connections to these are : Vcc pin 14, GND pin 7. All resistor values are in ohms, all capacitor values in mfd unless otherwise stated and should be rated at about 10 volts. This circuit is NOT suitable as it stands for CMOS working, and is intended for TTL.

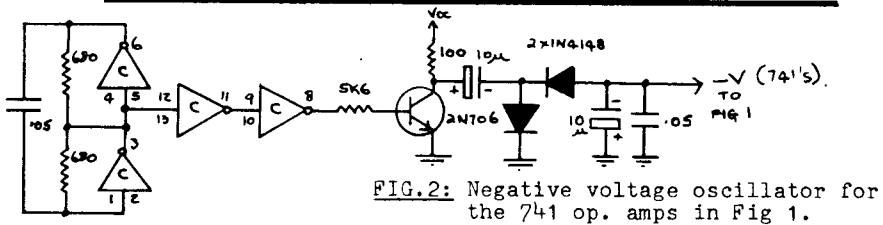
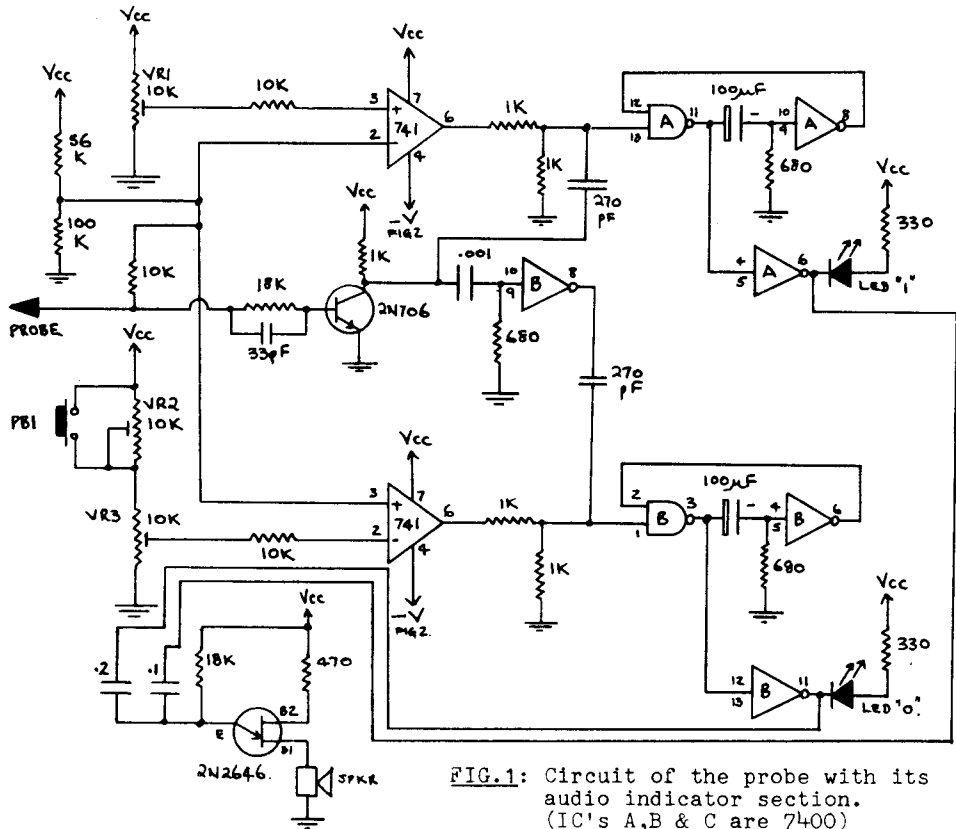
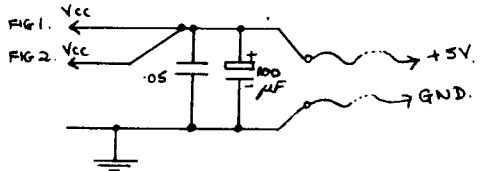


FIG.3: Decoupling for power pickup leads to probe.



# Be A REAL Ham

by Bob Selton WD8LKT

## HOW TO BECOME A REAL HAM, PROMOTE AMATEUR RADIO, AND CONFUSE THE GENERAL PUBLIC!

It's really very easy. Just follow these simple rules. There's nothing to it.

Rule 1 : Always refer to anyone who is not a ham as a civilian. This will impress them and make them want to become a ham.

- (a) Act in an officious manner at all times. John Q. Public will then think you really are something. Some hams will know the difference but John Q. may never find out.

Rule 2 : Use ham-type lingo at all times, especially on the air!

- (a) Never laugh over the air. Always say 'Hi hi' or in cases of extreme humour use, 'Ha Ha'.
- (b) The word 'handle' is preferred over 'name'. 'Handle' has a bit of an ill metre connotation and hints that you may have a mysterious and/or slightly unsavoury past. It adds a bit of excitement to your aura. A name is only something your civilian friends call you.
- (c) Never use the name of a country when discussing DX. Use the country prefix only. Make this a habit when talking with, or in front of, civilians.
- (d) Conversations in front of civilians should be of a highly technical nature, even if not understood, fake it.

Rule 3 : Use Q Signals especially in telephonic communications. It is hard to express the importance of this rule. The bureaucrats say that Q Signals were designed for CW use only. Do not fall for this bunk! Q Signals should be used at all times because :

- (a) They confuse hams and civilians alike.
- (b) They usually take longer to say than their plain English counterpart, e.g. QTH vs location.
- (c) They make you sound important and as if you know what you are doing.

(d) Q signals approved for phone operations are :

- QAC - Just around the corner
- QTH - Location, home, work, car
- QFB - Fine business
- QRX - Stand by
- QBM - Bicycle Mobile
- QRT - Leave the air
- QHT - Operating a hand-held
- QSY - Change frequency
- QSO - Contact
- QPM - Pedestrian Mobile
- QSI - Understand
- QCB - Good Buddy
- QRZ - See Rule 8
- QTT - Use 10-10 signals

Rule 4 : At the end of every phone QSO/contact be sure to click your mike button twice.

- (a) You will feel like an old-time Charlie Whiskey op.
- (b) Out of town hams will wonder what you're up to.
- (c) Civilians will think it is some kind of secret ritual and will be intrigued and/or jealous because they do not know what is happening and feel stupid.

Rule 5 : Identify your station at least once every two (2) minutes. Remember :

- (a) Your call sounds good over the air.
- (b) Civilians will be impressed with the workman-like manner with which you handle the mike.
- (c) Do not bother trying to remember the call of the ham on the other end. Identify according to this rule and he'll respond so often you'll never have to bother.

Rule 6 : Badmouth CB operators whenever possible, especially on the air.

- (a) Many CB operators have scanners and listen to 2 metres. They will feel put in their place and will immediately want to become a ham.
- (b) CBers who are now hams will feel glad that they finally saw the light.



Be A REAL Ham

- (c) Civilians often think hams and CBers are all alike. This will show them there is a difference and they'll be ashamed of their earlier confusion.

**Rule 7 :** Always clear the repeater if you make an unsuccessful CQ/call. The correct method is to give your call sign, phonetically if possible, and then say, 'Clear' or 'Off and clear'. (Isn't that what you do on the lower bands?)

- (a) N.B. Saying 'Clear' or, 'Off and clear' does not necessarily mean that you have gone off the air.
- (b) Alternate Method : Tell the frequency that you are going QRT or Quadrophonic Recrimination Tap. (See Rule 9).
- (c) When you are not sure what you want to do, say, 'Clear and monitoring'.

**Rule 8 :** Never ask if the frequency is in use. Say, 'QR Zed the frequency'.

- (a) Ignore any voice that says, 'This is the frequency and I wasn't calling you'.
- (b) Civilians and hams will know you are an experienced operator.

**Rule 9 :** Use catchy phonetics to avoid confusion. Long phonetics are better than short ones. Approved phonetics are :

A Aardvark	N Necromancy
B Botulismic	O Oceanography
C Cucumber	P Pseudopsychotic
D Defenestration	Q Quadrophonic
E Epistaxis	R Recrimination
F Fakir	S Schizophrenia
G Galvanization	T Tap
H Hymenopterous	U Ubiquitous
I Idiosyncratic	V Vulcanization
J Juxtaposition	W Wriggle
K Knickknack	X Xenophobia
L Lithographic	Y Yugoslavia
M Magnaminty	Z Zucchini

**Rule 10 :** Always spell your name phonetically, especially on the repeater.

- (a) This is extra important if you have a hard name like : Tom, Jim, Mike or Ed.
- (b) Names like Cumquat should never be spelled. Keep 'em guessing.
- (c) Remember: The idiot on the other end of the repeater might not be very smart.

**Rule 11 :** (This rule applies to CW operators but may be adopted for phone use) Get into the habit of always ending every transmission with KN (Da, di, da, da, dit).

- (a) No rare DX station will ever try to break into your contact.
- (b) CW operators wishing to show extreme good form should send long CQs, give their call sign once, followed by KN.

**Rule 12 :** (This rule applies to CW operators but may be adapted for phone use) To speed communications and impress the amateur community at large, send all CQs at a speed at least 26,5% faster than you can copy.

- (a) The station that hears you may ask you to slow down.
- (b) You can always ask him to slow down. You can't lose!

**Rule 13 :** The word 'destinated' has been approved for use, especially on 2 metres.

- (a) The phrase 'Mon back', meaning 'Come on back' has not been cleared for use on the ham bands.

The above article appeared in the Toledo Mobile Radio Association newsletter and was sent in by Graham ZS5EC.



# For Sale

Ohio Scientific Superboard II Microcomputer in case with built-in power supply. Various programmes and documentation. Value R200.00 Contact Kevin ZS2KE at 27091 (work) or 26307 (ask for room 21.)



## bulletin roster

20th November  
27th November  
4th December  
11th December  
18th December

Trevor ZS2AE  
Marge ZS2OB  
Brian ZS2AB  
Lionel ZS2DD  
Colin ZS2AO

Please let the bulletin readers have any news during the week prior to their bulletin. Phone numbers will be found on the front page.

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## Branch A.G.M. 1983



Brian ZS2AB (Left) presenting the ZS2AB Home Constructors Trophy to Mitch Rundle ZS2DK



Percy Buckley ZS2RM being presented with the ZS2OB DX Trophy by Marge ZS2OB.

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### CONFUSIUS: HE SAY

1. "Rotors never break when the weather is nice"
2. "The same goes for antennas"
3. "The higher your beam, the surer it is to break"
4. "He who buys a new piece of equipment usually sees it on a sale in the next issue of Radio ZS"
5. "He who wants rain should take his new rig out for Field Day".

# A.G.M. 1983



Above left: Dick ZS2RS "The IceCream King" together with some of his subjects.

Above Right: Jock Kotze (left) in earnest conversation with Peet ZS2BX who provided and cooked the delicious Karoo Lamb on the spit, and Trevor ZS2AE checking on the cooking.

Right: "The Remains". Clive ZS2GQ, Trevor ZS2TJ, Peet van Heerden ZS2BX, with xyl Hannah, at extreme right, carved up the meat with medical precision with interested spectators in the background.

Thanks to Clive Fife for these photos and others too numerous to include.



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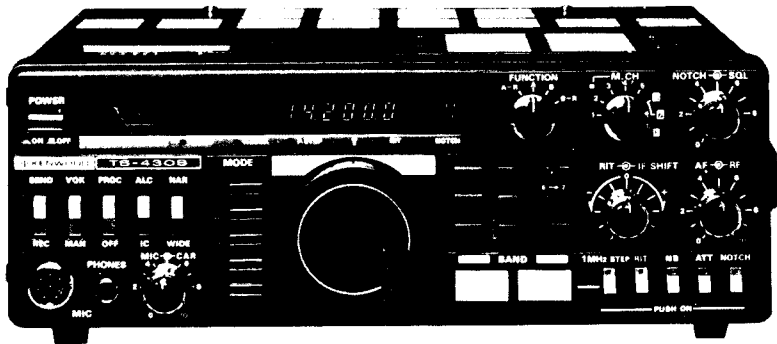
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