

Q S X P E

ZS2PE

FREQUENCIES:

| | |
|----------------|----------------------|
| Bulletin | 3640 Khz 7102 Khz |
| National Call | 145.5 Mhz |
| P.E. Repeater | 145.05/65 |
| Grahamstown | 145.15/75 |
| Lady's Slipper | 145.10/70 |



*Port Elizabeth Branch of the
South African Radio League*

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

16 JUL 1981

PORT ELIZABETH BRANCH.

NOTICE OF MEETING.

The monthly meeting of the Port Elizabeth Branch will take place at the Y.M.C.A. Havelock Street, Port Elizabeth at 8p.m. on Friday 21st August, 1981. This is the last meeting for the year before the A.G.M., so come along. There is to be a surprise item after tea.

A.G.M. A.G.M. A.G.M. A.G.M. A.G.M. A.G.M. A.G.M. A.G.M. A.G.M.

NOTICE OF MEETING.

THE ANNUAL GENERAL MEETING OF THE PORT ELIZABETH BRANCH OF THE S.A.R.L. WILL BE HELD AT 8 P.M. IN THE CRUSADER CLUB, ST. GEORGE'S PARK, PARK DRIVE, ON FRIDAY 18th SEPTEMBER, 1981.

AMONG THE ITEMS ON THE AGENDA WILL BE:

1. CHAIRMANS REPORT.
2. TREASURERS REPORT.
3. ELECTION OF OFFICE BEARERS.

FOR SALE: Barlow Wadley RX good condition R100.
WANTED: HC 75 antenna tuning unit.
Please contact: Dudley ZS2AW, 10 Cromwell Street, Grahamstown.

WELKOM: Ons verwelkom die volgende nuwe lede aan die tak en wens hulle baie vriendskap in die Tak en die Liga en voorspoed toe hulle die eksamen skryf:

Johannes van den Berg van Port Elizabeth, en A.J. Labuschagne van Queenstown.

Safety Thought

Play it safe. The Enemy

I am more powerful than all the combined armies of the world. I have destroyed more men than all the wars of the nations. I massacre thousands of people in a single year. I am more deadly than bullets and I have wrecked more homes than the mightiest of guns. I steal in the United States alone over 500 000 000 dollars each year. I spare no one, and I find my victims among the rich and poor alike; the young and the old; the strong and the weak.

Widows and orphans know me to their everlasting sorrow. I loom up in such proportions that I cast my shadow over every field of labour. I lurk in unseen places and do most of my work silently; you are warned against me yet you heed me not. I am relentless, merciless and cruel.

I am everywhere - in the home, on the streets, in the Plant, down the mine, on land, in the air and on the sea. I bring sickness, degradation and death, yet few seek me out to destroy me. I crush, I maim, I devastate. I will give you nothing and rob you of all you have. I am your worst enemy

I am CARELESSNESS !!! ZS6308

DON'T FORGET YOUR SUBS ARE NOW DUE - IF YOU DON'T INTEND TO RENEW WITH THE BRANCH PLEASE HAVE THE COURTESY TO LET US KNOW. Thanks.

Did you know "There are some things about electricity we are still not sure of? This things are called Whats".

MINUTES OF THE GENERAL MEETING OF THE PORT ELIZABETH BRANCH OF THE S.A.R.L. HELD AT THE Y.M.C.A., HAVELOCK STREET, PORT ELIZABETH ON 19TH JUNE, 1981.

PRESENT: 19 members and visitors

The Chairman welcomed the ladies, Kevin Eastwood a new member, and said it was pleasant to see all present.

APOLOGIES: ZS2TY, ZS2BF, ZS2SS and Clive Fife.

MINUTES: The Minutes of the Meeting held 15th May, 1981, having been published in QSX-PE and circulated, were taken as read, proposed by Brian ZS2AB and seconded by Lionel ZS2DD.

ARISING: The Chairman said that although the Treasurer was absent, it was due to illness, and not to the fact that he had absconded with the money - anyway, it couldn't have been a very long trip!

FINANCE: In the absence of the Treasurer, the Chairman said that it would be necessary to discuss what would be done with the Branch's fixed deposit account.
An electricity account for R2.17 had been received, and it was decided that it would be better to pay enough to cover six months.

CORRES: Letter from Johannesburg Branch re repeater fund.
Letter from H.Q. re Radio ZS and Call Book.
(The Chairman said that it was up to every member to ensure that their address and call sign were correct and also to inform the Secretary of any changes.)
Financial Statement from H.Q.
Minutes of Council Meeting.
Minutes of I.A.R.U. Conference in Brighton, England.
Letter from Ray Connolly. This would be published in QSX-PE.

GENERAL: On Sunday 28th June, it was envisaged that members and helpers would travel to Grahamstown to work at the repeater site. Helpers were needed to clear the roadway and the repeater enclosure, and it had been decided to replace the antenna and the co-ax. Cars would leave at 9am and anyone wishing to take advantage of lifts could advise the Secretary. The more people that went, the quicker the work would get done and it was hoped that a good number of the Grahamstown hams would also be present. Jeff ZS2GJ had said he would bring some helpers from East London.

The Chairman said that it had been decided that in place of a meeting in July, a social gathering in the form of a demonstration of home-brew equipment and the latest in commercial equipment, would be held. He was still awaiting confirmation of the venue which would either be the Park Drive Bowling Club or failing that, the Crusader Club. All those who wished to display their home-built equipment were welcome to do so, and the Algoa Branch members were cordially invited to attend as well. A notice would be printed in QSX with the final details and information would also be given on Branch bulletins. He hoped as many would turn up and make it a real social occasion.

There being no further business, the meeting was closed.

sgd:
F.W. Schönborn ZS2RS
Chairman

sgd:
M.T. Colson ZS2OB
Secretary

WANTED FOR USE AT AN EXHIBITION: Any World War II vintage equipment you may have hidden away is needed to exhibit at Kine-Park for a week during September. Equipment will be under constant supervision. More details at the next meeting, on bulletins and in QSX-PE.

technical

Page 3.

THE CARE AND MAINTENANCE OF NICAD (NiCd) BATTERIES WITH A VIEW TO ENSURING THEIR LONG LIFE.

Peter Sawyer ZS5DN continues his in-depth study.
With acknowledgement to CQ News letter - Durban Branch.

PART 2 : Charging.

In Charging, oxygen is generated at the positive electrode and it competes with the oxidation of the nickel hydroxide. This competition established the level of minimum current necessary to charge the cell. If the charge rate is increased, the percentage of current used for charging increases. Thus, higher charging rates give higher charging efficiency.

Charging should be accomplished using a constant current method. There is a safe rate which may be used for continuous trickle charging. This safe rate is usually the 20 h rate (0,05 C). The 20 h rate is, for example, 25 mA for a 500 mAh cell. Due to the charging efficiency, as we have already said, the 20 h rate has to be persisted in for approximately 28 H to effect a full charge.

During such a charge the cell pressure will settle below the safe level of approximately 138 kPa. (See graph). Some cells are especially rated at 3,3 h (0,3 C).

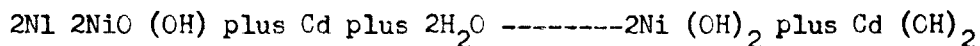
It is possible to charge NiCD cells at high rates, but the charger must be designed with a current programme to prevent the cell vents from opening and blowing off electrolyte, as the temperature and pressure will rise if the cell is abused. Once electrolyte has blown off, the cell will have been damaged (also see graph).

As an example of charging at a high rate, we give the following: an automatic charger for hand-held portable radio may run at the 10 h rate for 14 h, and then drop to the safe trickle charge rate of 20 h until the radio is removed from the charger.

Cells are encapsulated in battery housings, and are frequently fitted into un-ventilated battery compartments. This hinders cell heat dissipation whereby charging at rates over 0,05 C (once a cell has been fully charged) may shorten cell life.

The chemical process of charge is: nickel hydroxide at the positive plate becomes oxidised and the cadmium hydroxide at the negative plate become metallic cadmium. The charge is stored as chemical energy.

The chemical reaction is:



PART THREE NEXT MONTH.



Mr M B Jones

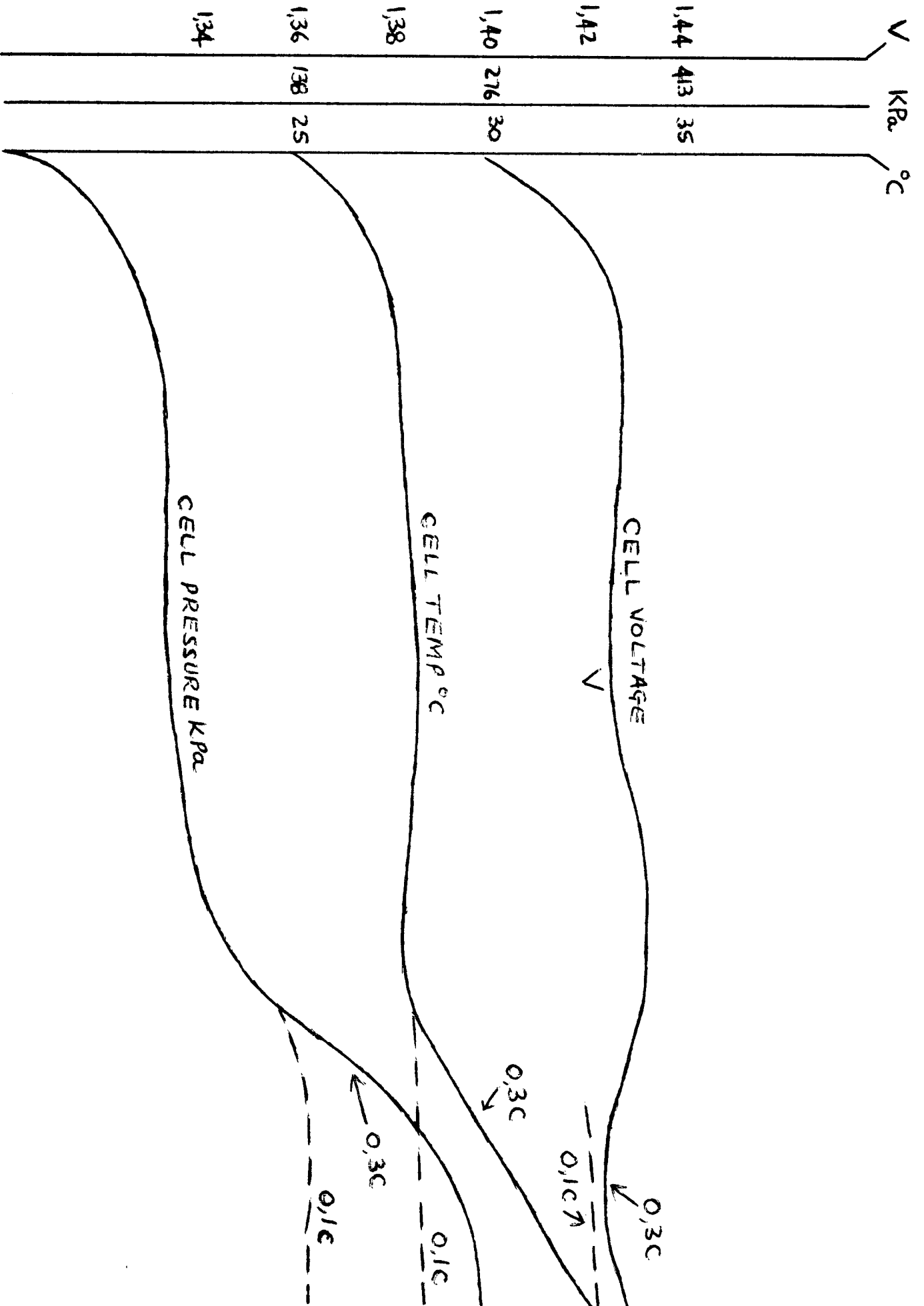
ZS2MJ

Fort Hare senior staff position

Mr M B Jones has been appointed Academic Registrar after being Assistant Registrar since 1971.

Mr Jones, who has a BSc (Natal), BA Hon (Potchefstroom) and the MBA (cum laude) degrees, was head of the Sasolburg Technical Services division of the Rubber Synthetic Company before coming to Fort Hare.

CONGRATULATIONS MIKE!



PERCENTAGE CHARGE VS PRESSURE, TEMP + VOLTAGE

FIG. 2.

REMEMBER WHEN?

(With acknowledgement to Clive Cornell ZS5 GQ and Durban Branch Newsleter CQ).

Remember when you called a few OM's on 40 or 80 meters, for a sked once a week for a Rag-chew. You stayed on the band for about 2 hours on A.M. or SSB, and had a really interesting QSO, swapping technical and other news, views etc., on a wide range of topics. What do you do now?? Listening on the 40 meter band, over a week end, if you hear 6 QSO's in progress, the band is crowded!!

Since the advent of VHF (50 MHz abd now 144 MHz) we all appear to be neglecting the HF band and settling for the "easy" fun modes. Sure, they are fun. You can use fairly cheap commercial gear, readily available, or ex-commercial converted sets, bought down in frequency from the 156 MHz commercial bands. The antennas are "easy" to build, and tune. Even getting a contact on 2 meters is "easy", just dial a channel and call C.Q. You don't even have to load up.

I had my ZR5 licence only a short while, but managed to fill 2 log books with 2 meter contacts, Big Deal!!!. That is not Ham Radio. I too run a commercial station but have come to realise that I am much the poorer for it. I started the wrong way, the "easy" way.

Lets face it, there are very few true hams left today. i.e. those who build their own equipment, and there should be more. We are not HAMS, we are becoming a bunch of natterbags, intent only on our own self destruction.

Has anyone thought of the reason for all the bickering and factionism on the air and within the League of late. An explanation worthy of consideration is that we know each other too well. We talk to each other the easy way - 2 meters.

Eventually we come on the band, for the sake of coming on, but have nothing to say, so, being human beings, we start to bicker. This is enough to start the ROT!

Please, let us wake up and start becoming hams and not a bunch of gasbags satisfying a masochistic urge to tear apart the comradeship and fraternity that has taken those before us so many years to build.

WE CAN DO IT. 73, Clive ZS5 GQ.

BE PREPARED.

Practical Wireless December 1980.

IT was just a matter of time before the microcomputers became a part of the police anti-crime arsenal.

A new device, called a Speed and Alignment Detector (SAD), designed by the Cranfield Institute of Technology in Britain, is being used to spot a drunken driver without a breathalyser test.

The traffic policeman will also be able to tell how well you are driving from a distance — and substantiate his observations with a printout.

The microprocessor-based device comprises of two rubber sensor hoses laid across the road about two metres apart followed by another set of hoses arranged in an arrow shape pointing down the carriageway.

• Electronic signals are passed to the microcomputer when a vehicle passes over the hoses, changing the pressure inside them.

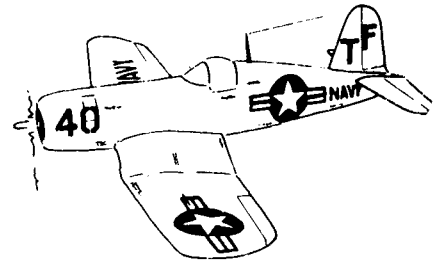
The SAD computes the vehicle's speed by measuring the time taken to cross the first two hoses while its alignment is checked as the front wheels cross the arms of the arrow. So, if the car is on a straight and constant path, both measuring arms of the device hit at the same time.

The information is printed on a keypad-sized printout fitted to the inside of the police car. The police officer can type in information on speed limitations and the extent of deviation from the straight path to match particular road conditions or regulations.

All proud owners of the popular FT101/2/2D/FT401/FT901 range of hf transceivers should think hard at this time about the increasing difficulty of obtaining spare valves. NEC and Toshiba ceased production two years ago and NEC are now refusing further orders. The FT101 was designed for use with these makes of PA stage valves and other makes are not satisfactory due to lack of compatibility. There is no agreed standard on inter-electrode capacity or mutual conductance, leading to biasing, oscillation and neutralising problems, when apparent equivalent TV valves are used. All this aside, it is probably a very sound investment to secure a stock of valves now whilst original specification devices are available. According to G3LLL, RCA tubes will not bias correctly, won't neutralise and oscillate continuously on TX and RX. (OK in TV sets, which is what they were made for.)

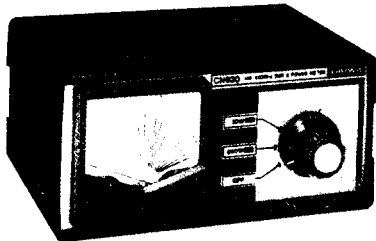
Thanks to Buck ZS2RM for this snippet.

DON'T FLY AROUND WITH FLY BY NIGHT OPERATIONS.



You Want

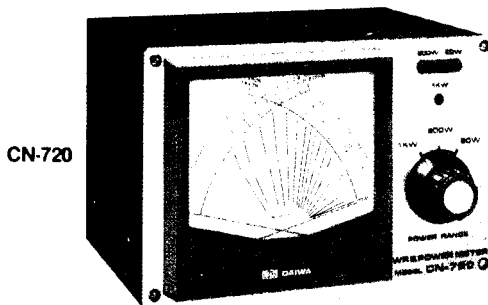
- Fast Service
- Fair Prices



CN-630

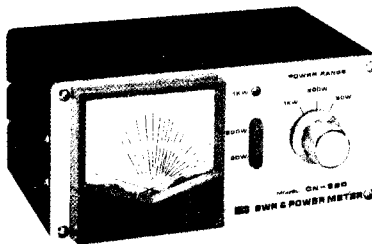
SWR & Power Meter Model CN-630

Simultaneous direct reading SWR,
Forward Power and Reflected Power.
Frequency Range: 140—450 MHz
SWR Detection Sensitivity: 5 Watts min.
Power: 2 Ranges (Forward, 20/200 Watts)
(Reflected, 4/40 Watts)
Tolerance: $\pm 10\%$ full scale
Input/output Impedance: 50 Ohms
Connectors: SO-239
Dimensions: 180 x 85 x 120 mm;
7.12 x 3.37 x 4.75 in.



CN-720

SAVE MONEY



CN-620

SWR & Power Meters Models CN-720 and CN-620

Simultaneous direct reading SWR,
Forward Power and Reflected Power.
Frequency Range: 1.8—150 MHz
SWR Detection Sensitivity: 5 Watts min.
Power: 3 Ranges (Forward, 20/200/1000 Watts)
(Reflected, 4/40/200 Watts)
Tolerance: $\pm 10\%$ full scale
Input/output Impedance: 50 Ohms
Connectors: SO-239
Dimensions: 180 x 120 x 130 mm;
7 x 4.75 x 5 in.
165 x 75 x 97 mm;
6.5 x 3 x 4 in.



**KENWOOD
TS-130S**



**KENWOOD
TR-2400**



**KENWOOD
R-1000**



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