

# QSX PE





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

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11-91

#### NOTICE OF MEETING

The monthly general meeting of the Branch for November will be held on Friday, 15th November 1991, starting at 20:15 at the Civil Defence Centre, Westview Drive, Mill Park, Port Elizabeth.

Subject to confirmation yet, we expect to have an interesting talk by a member of the Transnet Radio Section on the radio network that is used for controlling the operation of the railway system in the Eastern Cape.

This should be another very entertaining evening, so roll up and reserve your seats early. (All seats will be facing the engines). Bring your baggage along too.

# NO GENERAL MEETING IN DECEMBER

December is the busiest month of the year for most of us. The lucky ones are preparing to go away on holiday, and just about everybody faces a surfeit of office and other functions. For this reason it has been the practice of the Port Elizabeth Branch for years to skip the monthly meeting in December.

This year is no different, so we ask you to take note that there will be NO GENERAL MEETING on the usual third Friday in DECEMBER. Also because of the festive period, QSX will not appear as usual in December. It will appear a little different from usual, but around the same time as usual.

# First Lady of ZS is 88

IRIS Hayes ZS2AA, the first YL in South Africa to obtain an amateur licence, celebrated her 88th birthday on 27 October. One of the many greetings that she received came with a beautiful bouquet from the Managing Director of the YAESU organisation in Japan.

The Port Elizabeth Branch salutes you, Iris, and wishes you many more healthy and active years and happy hamming.

88 on your 88th.

## MINUTES OF THE GENERAL MEETING OF THE PORT ELIZABETH BRANCH OF THE SOUTH AFRICAN RADIO LEAGUE HELD AT THE CIVIL DEFENCE CENTRE, MILL PARK ON FRIDAY, 18 OCTOBER 1991

PRESENT: 46 members and visitors

APOLOGIES: As per attendance register

#### WELCOME:

The Chairman welcomed all to this, the first general meeting to follow the A.G.M., especially LYNNE ZS2MM after a two-month visit to Europe.

#### MINUTES OF THE PREVIOUS MEETING:

The minutes of the previous meeting held on the 16th August having been printed and circulated in QSX were taken as read and approved, proposed by : WOLF ZS2WG, and seconded by DICK ZS2RS.

#### MATTERS ARISING:

Comment was passed by several members on the very enjoyable A.G.M. held at our new meeting venue.

#### FINANCE:

Our Treasurer, COLIN ZS2CTR, reported that the Branch funds currently stood at R6 690,09 of which R898,50 is to the credit of the 1994 AGM Fund.

The Lucky Numbers draw, or alternatively "THE 30 CLUB DRAW" was won (AGAIN!) BY WOLF ZS2WG.

#### CORRESPONDENCE:

- 1. Letter re VAT to Branch Treasurer.
- 2. National Band Planning Committee reminder re repeater licences under control of the Branch.
- 3. Reminder of the next Packet Radio Indaba to be held on Sat. 26th October 1991. COLIN ZS2CTR is the Branch

#### Minutes of Meeting (Cont'd)

representative. Members with any ideas on this subject were invited to contact the Branch representative soon.

#### GENERAL:

DICK ZSZRS requested assistance with operating at JOTA, also for help in erecting antennas etc. Several members immediately offered their help. All other members were invited to come along just to show moral support. DICK indicated that for the first time ever, the Chief Guide would be transmitting her message from Port Elizabeth.

OWEN ZS2AZ had conveyed an apology for his absence, and he had indicated that the Yacht Club was now in a position to cater for parties up to about 40 people.

Pictures taken at the A.G.M. were placed on the tables for all to see.

RAPHY ZSZSP was willing to make his SHACK available to demonstrate Amateur Radio to interested groups, especially to organisations such as the Boy Scouts and the Girl Guides.

TREVOR ZS2AE reported that on a recent visit to the Reef area, the Radio Amateurs there were vehemently against Novices using the 2m band.

General reference was made to the interference being experienced on our repeaters, and whether anything could be done to eliminate this annoyance to repeater operation.

PETER ZS2PL has been discharged from hospital and now faces a triple heart bypass operation shortly. Good wishes for his speedy recuperation were expressed on behalf of the Branch.

An observation had been made that local hams were not particularly responsive to CQ calls on the repeaters, especially when "out of towners" called. All members were asked to respond to calls if at all possible, especially those from visitors, thus making them feel welcome.

A special request was made to keep our INITIAL overs short on the post-bulletin nets. This allows all stations wishing to log in to do so within a reasonable period of time. Comments not directly relevant to the bulletin should be restricted to subsequent 'overs'.

#### CLOSURE:

The business part of the meeting closed at 21:05 and the balance of the evening was spent chatting to "old" friends and making new ones.

# UARIABLE WOLTAGE/GURRENT ADD-ON for your CB POWER SUPPLY ....

ADD-ON for your CB POWER SUPPLY
Viv's Scrapbook

This circuit can be added to an existing inexpensive (e.g. CB) power supply to provide adjustable voltage and current regulation, limited by the capabilities of your power supply but in any case with a maximum current of 2 amps.

The input voltage supplied to the circuit may be anything from about 5 to 25 volts DC.

Transistor T2 must be mounted on a 100mm extruded heatsink, using silicone grease on both sides of the mica washer. Spray the heatsink matt black with aerosol paint. When using the voltage range 2-12v at maximum current, take care that the heatsink temperature does not exceed 90 degrees C.

C4 is mounted directly across the collector and emitter terminals of transistor T2.

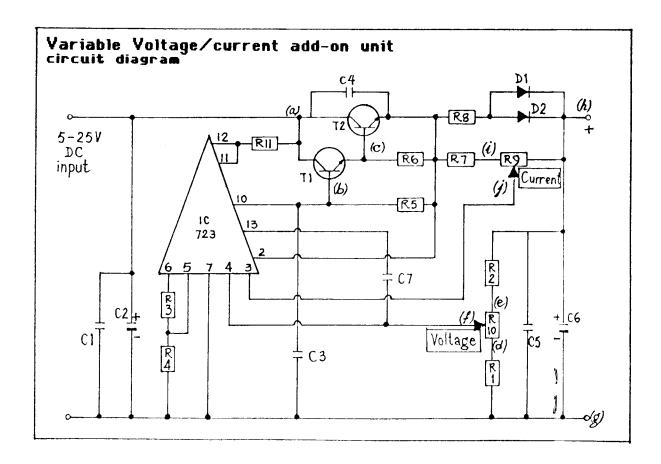
T1 is mounted on (but insulated from) the case near T2 and, for convenience, one end each of C1 and C2 can be attached to the same terminal tags used for connecting the collectors of the two devices together. The other ends of C1 and C2 are connected to the negative output terminal on the panel of the case.

C6 should be connected between the + and - output terminals.

Although you can use an ordinary testmeter to set the maximum voltage and current output levels, it is more convenient to include suitable meters on the front panel. A 0-25v DC voltmeter and an ampmeter with a full-scale deflection of at least 2 amps should be mounted on the front panel. The voltmeter is connected between the + and -terminals but, to fit the ampmeter into the circuit, all components shown as being attached to the + output terminal must be connected instead to one terminal of the ampmeter. The other terminal of the ampmeter is then connected on its own to the + output terminal.

Note the polarity of C2 and C6 and also D1 and D2. The rings on the diodes indicate the ends that must be connected to the veroboard track that is shown as connecting to the current-controlling potentiometer. (Cont'd next page)

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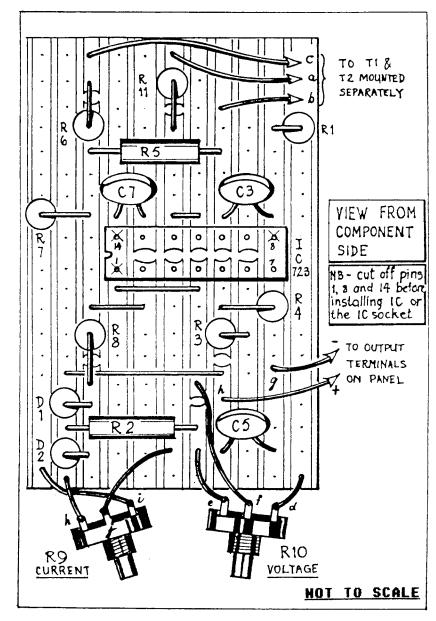


Also note the points at which the copper tracks must be cut away and where jumper leads have to be inserted to interconnect some tracks.

Pins 1, 8 and 14 of the IC (or an IC holder, which you will probably prefer to use) must be cut off before it is mounted. These pins are not used but the copper tracks to which they would be connected are used for other purposes.

#### A few words of warning:

(i) Do not connect an external voltage across the <u>output</u> terminals of this unit as it may blow TR2. Remember, some equipment that you may wish to power from this unit may have a capacitor across it which could be holding a charge. Discharge it before connecting up.



(ii) T1 and T2 must be insulated from 'earth' since their cases are also their collector terminals. Mica washers, covered with silicone grease to assist the transfer of heat, must be used between T1 and the case and between T2 and its heatsink. In addition, the mounting nuts and bolts of these transistors must be insulated from all

#### (From previous page)

metalwork except the transistor cases. Slip plastic tubing over the mounting screws where they pass through the case or heatsink and use fibre washers. Terminal tags on the bolts are used for connecting the transistors to the circuit.

(iii) The 723 IC comes in a 14-pin DIL and also a 10-pin ROUND package. The circuit diagram and layout given here are for a 14-pin DIL device. The <u>pinout numbering</u> for the ROUND model differs from that of the DIL package.

#### PARTS LIST

R	1	10	ohm	1/2-watt	C 1 1nF
		220		н	C 2 4700 uF 50v
R	3	820	ohm	le .	C 3 4n7
		390	ohm	11	C 4 1nF
R	5	1	k	H	C 5 1nF
R	6	100	ohm	II .	C 6 47 uF 50v
R	7	120	ohm	H	C 7 2n2
R		0,33	ohm	5 watt	D1, D2 1N4007
R		470	ohm	linear pot	D1, D2 1N4007
Ri	0	4k7	ohm	linear pot	T 1 2N3054
R1	1	470	ohm	1/2-watt	T 2 2N3055

# Remembrance Bay

The annual Remembrance Day services will be transmitted this Sunday, 10 November. The English service can be heard in the Amateur bands commencing at 10:00, but it will NOT be broadcast by the SABC. The service in Afrikaans will be broadcast by Radio Suid-Afrika and relayed on the Amateur bands at 13:45.

The usual Headquarters bulletin frequencies will be used, namely 7080 and 14282 kHz on SSB and 3660 and 7095 kHz using AM.

All operators are requested to observe radio silence during the broadcasts as a mark of respect for fellow hams who lost their lives in the defence of their country down the years.

# Communicating thru a Satellite

from SA AMSAT'S Satellite Guide

Some points to consider when using satellites:

POWER: The general principle is to use no more of the available transponder power than the mode chosen allows, to use modes which do not require much power, and to use the minimum bandwidth necessary.

TRANSMITTING PROCEDURE: Normal practice is to listen to the station receiver while transmitting. This allows:
 a) easy break-in between stations (true duplex),
 b) continuous monitoring for QRM,
 c) continuous doppler compensation, and
 d) the ability to monitor your signal quality.

For SSB operation the transmitted sideband convention requires USB to be received on the downlink so, for inverting transponders like OSCAR 13's, the transmitter should be set to LSB.

For CW operation the use of a filter (i.f. or audio) of no greater than 500 Hz bandwidth (-3dB) is recommended.

Power output should be limited to return a peak strength no greater than 10dB below that of the general beacon.

For continuous power modulation modes (ACSSB, DPSK/BPSK data, RTTY and experiments) the occupied bandwidth should be the minimum possible and anyway should be no wider than 3kHz. (Those continuous full-power-output, 20 kHz wide speech processors are out! - Ed.)

(More later)

#### AGM-'94 FIIND NEEDS INPUT

The fund still stands far below the R1 000 mark and we are aiming for some R7 500 to make the 1994 AGM of the League in Port Elizabeth one of the best patronised in many a year, and one that will long be remembered.

The event is now only a little more than two years off and all contributions will be gratefully accepted. Early donations to the fund are particularly welcome as they enable the Branch to generate more interest on the investment.



# This 'n That



The Branch participated once again in the annual <u>Jamboree on the Air</u>, this year during the weekend 19/20 Uctober, under the direction of Dick ZS2RS and Wolf ZS2WG. A number of Guides, Scouts and Cubs enjoyed the privilege of passing messages to their counterparts across the Globe from ZS2JAM at Gilsands Camp.

A message to the Guides, Scouts and Cubs of Southern Africa was transmitted from ZS2JAM by a senior official of the Guiding movement. Unfortunately the first part of her message was received poorly in most parts of the Country due to the unfavourable propagation conditions to which we have become accustomed on both 40 and 20 metres in spite of the HQ relay facilities.

Poor propagation conditions again - by now we've learnt not to expect better - also accounted for a rather unsatisfactory Digital Communications Advisory Committee Indaba on the Air on 26 October in connection with the PBBS/digipeater saga. The Branch appointees and Sysops decided to nominate representatives who could attend meetings in Johannesburg without excessive expenditure. They elected a Chairman and one Committee member before the bands closed up entirely.

The group intends to meet to discuss the whole question afresh and make proposals to Council. Chairing the Indaba, the President, Reno ZS60F agreed that in future a member of the Digicom committee must always be included in the SARL delegation when digital operating matters are discussed with the Authorities.

That was a very FB interview with Chairman Marge ZS20B giving Ham Radio a plug on SABC's Women's World on 31 October. Hope Marge doesn't succumb to the Ture of Professional Radio and turn in her ham ticket!

Visitors to, or passers—through, our fair city say we're not as friendly as we profess to be. They allege that we don't respond to their CQ's on 2 metres. So shake out of your lethargy, lads, loosen up and let's lay on our authentic Algoa amateur amiability (or amicability, as appropriate).

We congratulate Alderman John Vieira, immediate past Mayor of Port Elizabeth, who has been named Communicator of the Year by the Public Relations Institute. We're not surprised. We've been sending him QSX for some months now, and where can one find a better source of inspiration for communication?

Our thanks to Trevor ZS2AE and his band of willing helpers for replacing the Grahamstown repeater with a more modern unit last Saturday. I heard a birdie saying that some more work is needed up at the site but, in the mean time, the signal from Grahamstown sounds vastly better than it has been of late. Thanks, Trevor et al.

Do make an effort to come up on two metres at 19:30 on Tuesday evenings and support the `natter net'. A few regulars can usually be heard on either the Town or Slipper repeater and the more stations there are the more interesting the discussions become.

Congratulations to our birthday and anniversary people during the next 30 days:

Birthdays - November: Henk-Jan Busse ZS2-273 (19th); John St.Clair ZS2JR (21st); Fred Strutt ZS2JS (26th); Gerald Taylor ZS2AAX (28th). December: Ronnie Drescher ZR2AD and Rowland Mash ZS2-067 (1st); Clive Fife ZS2RT (5th); Lionel Coombe-Davis ZS2DD (6th); Bubbles Lookwhy (ZS6BGN) (8th); Lou Middendorp ZS2UI (10th); Jan Stark ZS2-265 (11th); Phil Bothma ZS2B (12th); Kay Strutt (ZS2JS) (13th); Anne Olivier ZR2ABC (18th); Marlene Ashwell ZR2ED (20th); Ron Clarke ZS2MF and Paul de Vos ZS2-276 (21st).

Phew!

Anniversaries - November: Shirley and Stoffel Carr ZS2C as well as Mel and Beavan Gwilt ZS2RL (20th). December: Dot and Vic Plumridge ZS2VP (9th); June ZS2JJ and Mike Jones ZS2MJ (10th); Jane and Clive Fife ZS2RT (12th); Marlene ZR2ED and Colin Ashwell ZS2AO (16th).

- ... to Damian Wright, Mike Bentley and Butch Butcher, who passed their 5 wpm morse tests prior to writing the RAE. You had the examiners worried for a while, but you showed how it should be done and we trust you'll have equal success in the RAE.
- ... to John Hugo ZS2J on his election as Deputy Mayor of Bathurst. Nice going, John.
- ... to Van ZS2Y and his XYL on their marriage last month. We hope you'll have many happy years together.

hospital in PE for a triple by-pass operation on 5 November following his heart attack in mid-August. We look forward to your full recovery and having your cheery voice back on the 700 repeater from Aston Bay, Peter.

to Owen ZSZAZ, who is leaving about this time on a visit to the USA, flying by the newly re-introduced SAA flights to the Big Apple, returning on 28 December; also to Harry 3DAOAU, who will be visiting the UK from 26 November until February next year.

#### PORT ELIZABETH BRANCH COMMITTEE

CHAIRMAN & PUBLICITY VICE CHAIRMAN, TREASURER SECRETARY SPECIAL EVENTS, CONTESTS,	Marge Weller Colin Robertson Fred Bonthuys	ZS20B ZS2CTR ZS2EQ	*31-1639 30-0570 63-3804
HAMNET AWARDS, RALLIES PROJECTS, TRAINING &	Al Akers Bud Voortman	ZS2U ZS2CA	30-2983 34-2770
QSX COMMITTEE EDITOR: QSX-PE LIBRARIAN, DF HUNTS, IPHA SOCIAL, GUEST SPEAKERS	Viv Moore Garth Laaks Vic Olivier Owen Thomas	ZS2VM ZS2HB ZS2SZ ZS2AZ	30-4433 38-1101 30-2440 54-2177
DIGITAL TECHNICAL LIAISON REPEATER WORKING GROUP	Lionel Coombe- Davis	ZS2DD	32-1770
CO-ORDINATOR	Trevor Scarr rge: 30-4597 for		

# 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)
145,700 MHz (2 metre band FM - Lady's Slipper)
51,400 MHz (automatic link with 2 m Lady's Slipper

51,400 MHz (automatic link with 2 m Lady's Slipper) 14,130 MHz (20 metres SSB) when conditions require.

#### BRANCH VHF & HF 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
Kareedouw Repeater	-145,075 / 145,675 MHz
University Repeater	145,175 / 145,775 MHz
6 metre beacon (ZS2SIX CW ID)	
2 metre beacon (ZS2PE CW ID)	144,910 MHz
Packet Bulletin Board ZU8KCD -	-144,675 % 14,109 MHz,
	Version 3.0 software

#### BRANCH MEETINGS

20:15 (8.15pm) on the third Friday of the month in the Civil Defence Centre, Westview Drive, Mill Park

\*\* De like being gour brouch \*\*