













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

P.O. BOX 10402 LINTON GRANGE 6015

November 1994

The next monthly general meeting of the Branch will be held on *FRIDAY*, *18 November 1994* in the Civil Defence Centre, Westview Drive, Mill Park, Port Elizabeth, commencing at 8 pm (20:00).

Important: Laurie Devereux, ZS5DL, our Councillor for Natal and the Eastern Cape, will present a short talk on matters of importance regarding the future of the League (this is our part of the 'Road Show' mentioned in RADIO ZS) and, apart from that, he will try to answer any questions and deal with any complaints that members may have about the whole spectrum of League affairs.

This is the opportunity you have been waiting for! Don't miss it! Come along and tell Laurie what you want your League to do for you. If you don't like what Council is doing, tell Laurie. He wants to know what the members of the League – your League – want for their money. You may be pleasantly surprised to find that he feels pretty much the way you do about most things but, if he is to help you, he needs all the ammunition you can give him!

Tea, coffee and munchies will be available at the interval.

FOR SALE * FOR SALE * FOR SALE

- A. from the deceased estate of ZS2WA -
- 1. MC 80 Desk mike
- 2. KENWOOD TR9000 2M Mobile all-mode transceiver
- 3. All-mode Packet Modem B2 F8 RB
- 4. SWR Meter HF-144MHZ CN 620A
- 5. SWR Meter HF only CD 250
- 6. TH6 HY-GAIN 6 Element HF beam
- 7. 100m Roll of New CO-AX Cable

Contact Werner's son, GLEN AHLERS, at Uitenhage [041] 966-2222 after hours.

B. from the shack of Wotsisname -

HAM-4 rotator, R900 - Contact Beavan ZS2RL at [041] 30-6968.

C. from Lovell's shack -

FT707 with FP707 power supply and FC707 antenna tuner – Lovell Rothman ZS2GS at [041] 30-8056.

CQ de ZS2RL

AT THE TIME OF WRITING THIS, our fifteen odd (approximately, not peculiar) RAE candidates are busy doing home-grown exam papers to test their recently acquired knowledge. Judging by the results of the first session I would say that a 100% pass rate would not be impossible. And it must also be said that they are a fine bunch who will be an asset to the Branch. The best of luck to them for the RAE on 10 November.

It would also be in order to thank all those involved in presenting the classes for a job well done, in particular our Minister of Education, Gerhard ZS2UM.

* * *

Laurie Devereaux, an SARL councillor, will be attending our November general meeting. I will be taking care of his physical needs, and of course also briefing him on who all the trouble-makers are.

Our side of the meeting will be made as brief as possible, to maximise the time available to him. He will firstly be giving a presentation which will highlight certain areas of concern in League affairs, and the measures HQ propose adopting to deal with these. After this topic has been dealt with, the floor will then be open for general discussion - he has indicated that his visit will not be adjudged a success unless he has heard all your gripes so that he can take it all back with him.

If you do not let your voice be heard at the meeting, then you will be required to forever hold your peace! (you will be required to leave your piece at the door upon arrival).

* * *

Soon we will be the proud owners of an updated membership list. This list will only contain the names of those who have made direct or indirect contributions of equity to the Branch, of appropriate magnitude. Need it be said that this register determines the recipients of Quite Some Xtraordinary news?

For the less erudite: pay up, or we cut your coax.

73s Beavan

URANUS REVISITED

Many members will recall the standing ovation that Marge ZS2OB and Lynne ZS2MM received when they presented a quiz at one of our Branch meetings a few years ago. We never did find out whether Uranus has a corona or not, did we?

Well, thanks to the marvels of packet radio, we have now learned that three spectacular new images received with the aid of the Hubble Space Telescope (HST) show that Uranus not only has several rings but also at least five inner moons, with bright clouds and a high-altitude haze down South! No mention is made of a corona.

Hubble's new views were obtained on Aug. 14, 1994, when the planet was 2.8 billion kilometers from Earth. The rings were previously seen in such detail only in close-up photographs taken in 1986 when Voyager 2 flew past Uranus.

In the new Hubble images, several of Uranus' rings are visible, including the outermost Epsilon ring. The planet, which has a total of 11 concentric rings of dark dust, is tipped such that its rotation axis lies in the plane of its orbit. Now, everybody knows what *that* means – HST gets a good look at the rings around Uranus because they appear nearly face-on as seen from the ground.

The detail in the HST observations will allow astronomers to determine the movements of the moons more precisely, leading to a better understanding of Uranus' unusual dynamics.

So, with HST peering closely at heavenly bodies, remember – SMILE! You could be on its candid camera!

Especially if you walk with a wiggle.



HAMNET NEWS

From time to time I hear the following, or words to this effect: "What is the purpose of joining Hamnet? In an emergency, any ham, whether Hamnet member or not, will be prepared to provide communications".

This willingness, while commendable, is on its own of little or no value. Like me, you can no doubt cite several examples of enthusiastic but incompetent people who have done, or almost done, more harm than good through their actions. It is the combination of willingness and ability that makes the ham a valuable communicator in an emergency.

average ham communicate quite effectively under normal circumstances, though there is always room for improvement. Handling traffic under emergency conditions is somewhat demanding. This is borne out by the fact that so many hams find the requirement of passing a test on modules certain. for Hamnet membership a daunting prospect.

The purpose of Hamnet is to help you to be better prepared for emergency operations. It must be emphasised though, that Hamnet is a low-key organisation. The average ham is seldom, if ever, likely to be involved in emergency operations and therefore it does not make sense to spend too much time and effort preparing for this. I feel that preparing for emergency operations follows the law of diminishing returns. Spending X amount of time and effort

on preparing for emergency operation may result in a big improvement in your capabilities. A further X amount of time and effort will result in somewhat less of an improvement, and so on.

The idea is to adjust the time and effort you spend so that it is not to the detriment of other important activities and commitments and yet results in a significant improvement in your abilities. That is for you to determine. Bear in mind that this improvement will be beneficial to your normal operating too. It also fits in with rule six of the amateur's code. What? You haven't heard of the Amateur's code? You will find it near the front of any ARRL Radio Amateur's Handbook.

Congratulations to Matt Wallace ZS2MW of East London, who has passed all five modules. Matt came all the way from East London to Hamburg, where we were operating a DXpedition, in order to do the modules.

73.

AI, ZS2U

[Hey, Al - remember, it's a *PFX* pedition now!-Fid.]

RAE Behind Us

As this goes to print, the sweat and tears of the RAE are being mopped up and our candidates face the even worse ordeal of awaiting the results. We trust that, when the long-awaited letter arrives, the contents are favourable. In fact, from the specimen examination papers attempted at the RAE classes, it seems quite likely that we shall have a 100% pass rate.

At this juncture it would be appropriate to **thank Rob Salmon**, ZR2AAQ, for providing refreshments every Monday evening for the class. Much appreciated, Rob! We're sorry that XYL Celia's health precluded her attending many of the classes and wish her well both healthwise and exam-wise.

Also, we express our gratitude to the Westering High School for making their premises available to us for the writing of the RAE.

Thanks

Having received a merit award for the production of QSX, I should like to thank all those who provided interesting items that make QSX what it is, and also Vic Olivier and family for taking care of the boring part of the work of getting QSX out to you every month. Thanks also to Sandy for providing and printing the labels. Incidentally, Vic has saved us quite a few rand by adopting the no-envelope postage method. I see that another branch is following Vic's example.

Members Questionnaire

Did you fail to return the questionnaire in last month's QSX regarding your personal details that we need for our Branch database? What a lunkhead! Come on, pull yourself together do it now!

Subscriptions

Of course, if you haven't renewed your subscriptions, you won't be on our database anyway, so don't worry to complete the questionnaire. Some 36 members had not renewed at the last count. I'm not going to remind you to do so right away, because you won't be getting this issue of QSX anyway! Or RADIO ZS. Or OSLs via the Bureau.

Oscar-21 Silent

Oscar-21, otherwise known as R\$14, has been orbiting the Earth for some time now and last year started transmitting not only digitized speech but also pictures in the ordinary WEFAX format such as we use for the local retransmissions from Meteosat-5. It also provided a repeater facility alternately with the other transmissions. Unfortunately, Oscar-21 fell silent a couple of weeks ago. At this juncture I have no information on whether it is likely to be revived.

Branch Meeting Schedule

There will be NO Branch general meeting in **DECEMBER**. Our November meeting will be the last for 1994 and the first meeting next year will

be held on January 20, when Andre ZS2ACP will speak on the handling of firearms and on target shooting. Bring your mother-in-law.

Incidentally, Andre took second place in the Standard Gun class in the final leg of the SA Championships recently. Although his score equalled that of the declared winner, the method of determining the outcome unfortunately dropped Andre a spot. Sorry about that, Andre, but congratulations on an outstanding achievement.

George Club Formed

We hear that about 20 people attended the recent meeting (and many sent their apologies) at which it was decided to form an Amateur Radio Club in George. OM Henry Chamberlain ZS1AAZ of Stellenbosch gave an interesting demonstration of Wefax, packet radio and Amtor and a talk on ham radio in general.

The Club, which has yet to adopt a name, will meet at the George Library at 7pm on the first Tuesday of every month. There are big plans for the future. We wish you every success.

Voyagers Still in QSO

Now 8,7 billion km and 6,7 billion km respectively from Earth, Voyager I and 2 continue to send back data about the solar wind, cosmic rays and the interplanetary space environment as they head out of our solar system. NASA/JPL's Deep Space Network uses 70-metre dish antennas to communicate with the spacecraft. Most data is sent at 160 bits per second, with some scientific data coming in at 600 or 1 400bps.

Strike me Down!

Lightning sometimes plays malicious but non-lethal tricks. A Maritzburg minister was hit while delivering his sermon. Although he was hurled from his pulpit into his congregation, he survived! [Maybe, but I'm sure the experience was bad for business -Ed.]

When a Free State woman was drinking coffee with friends on the stoep, she was struck by a bolt from the blue, the lightning tore every stitch of clothing from her body...but she was left unharmed! [Those Viystaat okes are so viarag! - Ed.]

Moonbounce!

Keith, ZS6TW, son of Garth, was pleased to work a Stateside station via EME on 2 metres CW recently. Keith was running about 140w DC input with a 17-element Yagi. The American was running considerably more (at least another nought) and using a dish.

PACKET, SSTV, WEFAX KITS

Vic, ZS2SZ, has two Baycom kits available (crystal, main IC, PC board and software) as well as two PC boards only for the WEFAX unit. Contact Vic (30-2440) if you're interested.

Gary ZR2ABU has a few HamComm kits for slow-scan TV, CW and RTTY at R65 plus R5p&p each. Join the growing SSTV gang on HF or VHF! Tel. 38-1101 after hours.

BITS AND BAUDS EXPLAINED

JIM PIPER, KD6YKL

Back in the days of yore (not mine, yore), when digital communications meant interrupted continuous wave (CW), folks measured transmission rates in words per minute. Then came Teletype and the favoured "yardstick" for information transmission rates became the *baud* (after French keyboard pioneer Emile Baudot).

As speed advanced to 300 baud, that measure of transmission rate over a digital communications link (which can be a telegraph wire or a radio path) served well. But technology continued to press forward. As rates passed 1200 bits per second (bps), 300 baud began to seem smallish.

Today's fibre-optic lines allow data rates as high as 2,5 gigabits per second (2,500,000,000 bps). Even our relatively narrow UHF ham bands can easily carry data at 9,600 bps.

Most hams use *baud* to describe data rate regardless of the transmission medium. Yet confusing band and bps clouds the discussion of data transmission rates. (Its a little like asking what time it is when you want to know how much time is left).

The problem with the indiscriminate use of the term *baud* stems from a misunderstanding of its meaning. According to Webster, the IEEE and the ARRI, a baud is "a unit of signalling speed equal to one discrete condition or event per second". In CW, a "discrete signalling condition" occurs each time a radio transmitter is keyed on or off.

How does this relate to baud? If you key your transmitter at the rate of 5 words per minute and the average word length is six characters, and each character has an average of three dits and dahs, you are producing 180 symbols per minute (5 wpm x 6 x 6). You could say that you were transmitting CW at 6 baud because you are transmitting an average of 360 discrete conditions per minute, or 6 per second. Of course, we normally don't describe CW rates in baud, but in words per minute.

One often hears packet radio and voice frequency modems discussed in terms of baud. The actual rate at which data (i.e., digital information) flows depends on the ratio of bits per baud. Baud rate and bit rate are equal only at speeds of 300 baud and below, and only for FSK modulation without parity bits. Other modulation schemes such as phase-shift keying (PSK, BPSK, and QPSK), CLOVER, etc., stuff more bits into each baud. That's why, for the sake of accuracy. I encourage you to use the much less confusing bits-per-second measure rather than the baud.

Forced Membership of SARL?

GARTH LAAKS ZS2HB

In an interview that I had with our SARL President when he visited PE recently, he conceded that the PMG's staff did not ask us to telephone them if we have not received our 1994 'licence' printout. The P&T official merely asked whether the League could assist in any way, but the decision to have members telephone Pretoria came from the SARL side. So, as I well knew, I was right all along, as were most thinking hams who supported me after the unfortunate HQ bulletin saga in July. Hans explained that, in HQ's experience, most people *prefer* to phone rather than write. Be that as it may, the HQ bulletin was gravely misleading.

In this affair, and on at least two other occasions, I was described as `negative' for demanding fairplay and observance of the rules in our League. I therefore took the opportunity to explain to the President that I have never *initiated* a confrontation with HQ. In the half-dozen or so disputes that we have had, I have merely been reacting to one or other action by SARL officialdom that was demonstrably erroneous, misleading or unconstitutional and/or was not in accordance with the declared wishes of the members.

With the air now cleared, I looked forward to an improved relationship with Council. My bubble of cuphoria, however, burst when I received the October RADIO ZS and found that `THEY' have done it again!

In the fine print of the minutes of the August Council Meeting, which few members unfortunately appear to read, it emerges that Council approached the Department of P&T in July with a view to having membership of the League made a prerequisite for holding an amateur licence.

The minutes report that P&T invited a formal proposal in this regard. The President and Hon. Secretary would accordingly compile a document but, before submitting it to the PMG, they

would send copies to all branches for consideration "in terms of Rule 152 of the Constitution".

You assume this is impeccable observance of the letter of the Constitution, right? WRONG! Most members probably have an out-of-date copy of the Constitution and therefore would not know, but those who check will find that Article 152 (as amended at AGM 1992) expressly prohibits even a feeler being put out to the PMG before majority support for any proposal has been obtained via the branches.

Even without such prohibition, don't you think Council would have been wise to first consult branches on a matter with such serious ramifications as the current proposal holds for *all* amateurs in South Africa.' None of the members to whom *I* have spoken likes the idea.

In fact, this latest, umpteenth unilateral action by Council is itself reason enough for the proposal to be thrown out. How can the PMG be expected to demand membership of an organisation that repeatedly disregards its own Constitution and the expressed wishes of its members, alienating them rather than attracting more?

L3 Although the decision to draft a proposal was taken in August, we have not yet received the document.

How Often do you Want QSX?

Due to yet another increase in the price of paper, our printers have been forced to raise their charge for printing QSX. Their special price to us is still way below what we might normally pay, and we are grateful that Instant Printing has maintained it for some three years now, absorbing several increases in paper and other costs along the way.

Figures produced by our Treasurer, Clive, show that the Branch share of subscriptions this financial year has amounted to R1623 to date, with social members providing another R1040. The Branch levy of R5, introduced a year or so ago to help cover QSX costs, and a few kind donations from members towards QSX has netted us R580. The grand total of our income, therefore, was R3243.

Expected QSX costs for the year will be R3000, made up as follows:

facilities, etc. To rely on our occasional fleamarket is not sound financial policy. The Committee has, therefore, once again come to the conclusion that something needs to be done about our major expenditure item, namely QSX.

Although the Newsletter is important to the Branch, it is true that much of its contents is also heard on the weekly bulletins, so members would not be left totally in the dark if QSX were to come out, say, every second or even every third month, saving the Branch about R1380 or R1840 respectively per annum.

On the other hand, if it is to remain a monthly publication, we will once again need to look at ways of financing it, and a voluntary contribution of around R12 per member per annum represents about the minimum that will see us

Printing Postage R120 pm

R110 pm (reduced bulk posting rate)

Total

R230 pm or R2760 for the year.

Hidden costs: Printer ribbons, wear & tear, paper, glue, miscellaneous items: say R20 per month, or R240 per year. GRAND TOTAL = R3000.

This leaves a mere R243 for running the Branch. Bearing in mind that electricity costs for repeaters amount to R238,51 to date (5 months), and the cost of three Branch licences (ZS2PE, ZS2JAM and ZT2AEK (Wfx station)) is R72, it is clear that we have nothing left to provide services to members, such as maintenance and extension of repeater

through.

Perhaps some of our members could find sponsors to help with the production costs?

Please think about all this, discuss it with your fellow members and let's have your views at the Branch meeting on 18 November.

MINUTES OF THE GENERAL MEETING OF THE PORT ELIZABETH BRANCH OF THE SOUTH AFRICAN RADIO LEAGUE HELD AT THE CIVIL DEFENCE CENTRE, MILL PARK, PORT ELIZABETH ON FRIDAY, 21 OCTOBER 1994

The meeting opened at 19:30 with approximately 44 members and visitors present. **Apologies :** Christopher ZS2AAW

- 1. Welcome Mike Morgan, Jenny Olivier
- 2. Silent Key The meeting observed a minute of silence for ZS2WA (Werner)
- **3.** Acceptance of minutes of meeting of 19 August Proposed : ZS2SNA (Sean), Seconded : ZS2MM (Lynne)
- 4. Visit by ZS5AKV (Hans) & Counciler to next GBM
- Hans & committee members had met on 19 October and spoken in general terms about areas of concern such as finance and membership.
- * A counciler will attend the next business meeting (Nov) and give a presentation and listen to any problems that membership have.
- **5.** Message from Len Silberman (New General Manager) Len has replaced Reno & assures all members that he will strive to provide the best service possible.
- 6. Report-back on JOTA
 - * Walmer: Julian (ZS2WSG) made 25 Contacts
 - 13 on 20M, 3 on 15M, rest on 40M
 - * Kabega Scout Hall (ZS2PE): Lynne (ZS2MM)
 - Scouts were briefed beforehand (format of what to say) by the Scoutmaster
 - They spoke to scouts & girl guides all over the country
 - Communication: mainly on 40M & very little on 20M
- * Gilsands: Dick (ZS2RS) and Owen (ZS2AZ)
 - Communication : on 40M & 20M
- * Beavan expressed a word of thanks to all those who were involved in JOTA.
- * A letter of thanks from T. Robinson (Scout Regional Commissioner)
- 6.1 Proposals for the future
 - * Establish guidelines regarding operation by children: eg.
 - * A licensed ham must establish all QSO's
 - * How long QSO?
 - * How long should a child operate?

The above questions apply to all special events & will be further discussed in the Committee Meeting.

- 7. Awards were handed to the following persons who were not present at the AGM:
- * Constructors Trophy: Shared by Tof & Neels jointly,

- * First-Class Service to Branch: Sandy (All work put into QSX)
- First-Class Service to Branch: Garth (All work put into QSX)
- * QRP : Viv
- 8. Auction: from shack of late Basil Gibson:
- Kenwood TS510 would be sold by private tender at end of October. 10% of proceeds of sale of all items is donated to the Branch and the balance goes to Basil's widow.
- 9. Induction of new members and activation of existing members
- * Once students pass exam a special evening be organized to tell them about operating practices, different modes of transmission and explain the different rigs on the market etc.
- * At the same time appoint an Almer for each student, whose function would be to encourage the student to attend business meetings, guide and encourage the student to actively participate in ham radio. Almers could also be appointed to encourage the older members who have not been participating actively, to do so.
- 10. Social: Announcements by Owen ZS2AZ (Social affairs portfolio)
- * Owen asks all members to complete the form found in October QSX and to please forward it to him (ic. give to him at next business meeting or post to Branch)
- Christmas Dinner: 3 December 1994 to be held at Swartkops Yacht Club. Cost is R35 per person. Please let Owen know as soon as possible.
- * Bingo evening to be held every second meeting.
- * A Speaker at every alternate meeting.
- ⁴ Roger Davis has a farm in **Plettenburg Bay.** The farm has accommodation for 4 people and caravan sites. The proposal is to have a Branch meeting there in February and run a DF hunt while in Plett.

Owen priced accommodation in that area:

- single: R49 Bed & breakfast
- * double : R49 (for first person) and R29 (for each additional person) Bed & Breakfast

11. General

11.1 Club house

There was general discussion about the Wellington Park site ie. size of proposed building etc. The question arose whether a site should not preferably be found closer to the Western suburbs.

11.2 Library

* A member pointed out that the library does not contain a good book on antenna construction.

We need a stock of RAE and other manuals

11.3 Finance

Bank balance is approximately R10 000

11.4 Banners

Lynne (ZS2MM) requests that all Algoa Rally banners be returned to her as soon as possible.

12. Closure & tea

Business was concluded at approximately 21:15. After tea various items were auctioned.

UHF/VHF OPENINGS

In several openings recently, a number of long-distance contacts have been made between members of the Branch. Initially, we received a report from Cradock that Wolf ZS2WG and Garth ZS2HB had been heard breaking through on their repeater on 145,650 MHz one morning. A few days later, actual two-way contacts were made between Wolf in PE and Dick ZR2ABH and Daan ZS2BW in Cradock.

Next, Willie ZS1ON at Bredasdorp spoke to Colin ZS2CR in East London via the Slipper repeater – a hop of about 280 for Colin, to which we have already grown accustomed, but a good 530 km or more between Willie and Slipper.

But perhaps the most impressive achievement was a direct contact on 70cm between Wolf ZS2WG and Colin ZS2CR on 1 November.

Are these perhaps Eastern Cape or other distance records?



Left—A picture received from OSCAR-21/RS14 in the WEFAX format on 145,990 MHz before the satellite went silent recently. Commemorating the first manned space hight to the Moon 25 years ago, OSCAR-21 also broadcast a recording of Neil Armstrong's words as he descended the ladder and set the first human foot on the Moon

Silent Key

We were sorry to learn of the passing of OM Werner Ahlers, ZS2WA on 11 October after a long bout of ill-health. Our condolences go to his family.

Congralulations

on your birthdays:

November

26 Fred Strutt ZS2JS

28 Gerald Taylor ZS2AAX

December

1 Ronnie Drescher ZR2AD Rowland Mash ZS2-067

5 Clive Fife ZS2RT

6 Lionel Coombe-Davis ZS2DD

8 Bubbles Lookwhy XYL of ZS6BGN

10 Lou Middendorp ZS2UI

12 Phil Bothma ZS2B

13 Kay Strutt XYL of ZS2JS

14 David Butcher ZR2DCB

17 Andre Retief ZR2AAZ

18 Anne Olivier ZR2ABC

on your anniversaries:

December

9 Dot & Vic Plumridge ZS2VP

10 June & Mike Jones ZS2JI/ZS2MJ

12 Jane & Clive Fife ZS2RT

13 Martie & Dick vdBerg ZR2ABH

16 Marlene & Colin Ashwell ZR2ED/-ZS2AO

Teresa & Andy Smit ZS6TD

on your new arrival:

Robin ZR2A & Jane on the birth of a baby son on 1 November

on your achievements:

Andre ZS2ACP for taking 2nd place in the SA Standard Gun section of the SA Championships. While House - Raphey ZS2SP has been in and out twice. Hope you're fit again when this reaches you, Raphey.

Gallivanting -

* Andre ZSZBK and XYL Renett visiting Penang, Kuala Lumpur and Singapore Island in Malaysia as a reward from the Saltmine for achieving 110% of his Branch's profit target for the year. Congrats, Andre!

* Steve Williams, visiting Italy and Germany for 10 days checking on new TV transmitters for the Saltmine.

Melcome to Barry G4TAM, his sister and her husband Les, and their son Stephen (who holds a 2E1 callsign) – Lynne and Julian are showing them around the Southern Cape.

Welcome back from the USA and Southern Cape respectively to John Hugo ZS2J and the Oliviers Anne ZR2ABC and Vic ZS2SZ. It's good to have you back.

An American ham, Tom Hark, KB8TAG, is a 'rockhound', i.e. one who collects precious and semi-precious stones. He is looking for a local ham to chew the cud with. Write to him at PO Box 30x4341, Charlestown, West Virginia, 25364 USA.

Port Elizabeth Branch Committee

Channon, Rallies	Beavan Gwilt ZS2RL	30-6968
Vice Charman, Social	Owen Thomas ZS2AZ	38-4134
assisting with refreshments at meetings	Bill Hodges ZS2ABZ	51-2580
Secretary	Renée Olivier ZR2ABD	30-2440
Treasurer, Assets Control	Clive Fife ZS2RT	32-3203
assisted with Assets Control by	Lynne Crothall ZS2MM	35-4671
Awards, Library	Peter Flynn ZS2PF	46-4096
Repeaters, Packet	Wolf Gerstle ZS2WG	30-1510
Special Events	Dick Schönborn ZS2RS	56-3908
QSX Manager	Vic Olivier ZS2SZ	30-2440
assisting with QSX Editing layout	Garth Laaks ZS2HB	38-1101
Technical Classes	Gerhard Baum ZS2UM	30-5224

Branch VHF & Other Services

REPEATERS	
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Town VIII	050/650 Kareede	uw 1	145,125/725
- Lown UHF	438,650 Ladv's S	lipper 1	145,100/700
Grahamstown 145.	150/750 Uitenha	ge 1	145,075/675
Cradock 145.	050/650	•	

OTHER SERVICES								
Packet Bulletin Board (ZS0NTP)	 	 			 		• • •	144,675
Digipeater (Grahamstown - ZS0GHT)	 	 	.		 			144,675
2m Beacon (ZS2VIII: CW ID)	 	 	· · · ·		 	,		144,910
6m Beacon (ZS2SIX CW ID)	 	 			 	, 		50,005
6m Link with Lady's Slipper 2m Repeater .	 	 	.		 			51,400
Wefax Relay (Meteosat)	 	 		· 	 			145,350

Sunday Bulletins

Branch bulletins are transmitted on Sundays immediately after the Headquarters English transmission, i.e. at about 08:45, on 3640 and 7098 kHz as well as on the 2 metre linked repeater system giving coastwise coverage from East London to beyond Knysna (depending on link availability) via 145,750, 145,700 & 145,725 MHz.

Date	Prepare and Read on 145,700
20 Nov	ZS2PF
27	ZS2WG
4 Dec	ZS2RS
11	ZS2RT
18	ZS2AZ
25	ZS2RL

IMPORTANT DATES BRANCH MEETS 18 November 1994 20 January 1995 (no general meeting in December)