QSX PE

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

Season's Greetings

Port Elizabeth Branch of the South African Radio League

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

Dec. 81

FROM THE CHAIR.

Once again, all too soon we come to the end of yet another year. Where did it go and what did we achieve we surely will ask ourselves.
A time of peace and goodwill, and for the first time ever, the Port Elizabeth branch will be contributing to that goodwill which is traditional at this time.
As a result of our raffle we shall be donating R100 to a deserving cause yet to be nominated. You, our members will also benefit to the tune of a R5 subsidy off the price of our travelling supper.
We all tend to take life so much for granted and whilst we are aware of the plight of many others less fortunate than ourselves, we also tend to do so little about it.
I therefore feel that this is a tremendous achievement by you, the branch members, who have made it possible. A little effort by each member has resulted in making life a bit more bearable for a few underpriveledged.
We all tend to shy away from raffles, but this one has a difference. Yes, the lucky ticket holder will receive a magnificent hamper which will ensure unequalled feasting on Christmas day and several days thereafter, but his meagre contribution will possibly ensure a happier day for some less fortunate. My heartfelt thanks to all who made the effort.
On behalf of the committee, I wish you and your families a happy and blessed Christmas and a prosperous New Year.

73, Dick. ZS2RS.

****

NEWS and VIEWS

PLEASE REMEMBER THAT THERE WILL BE NO BRANCH MEETING FOR DECEMBER - MEETINGS START AGAIN IN JANUARY, 1982.

Many thanks to all those who went to the trouble of selling the raffle tickets. Unfortunately this newsletter goes to press too early to be able to let you know the winners of the hampers and the charity which received our donation, but these will be announced on Bulletins and in January QSX. Thanks again.

Welcome back to our travellers to the Far East. Cyril ZS2KX and Bette ZS2LO visited Taiwan, Bangkok and Hong Kong, but unfortunately arrived back with 'flu. Hope you enjoyed yourselves and are over the 'flu now.

Bon voyage to another traveller John ZS2JR who has taken daughter Vanessa on a three-week trip which includes Hong Kong and the U.K.

White House visitors: Two of our members, Vi ZS2BR and Buck ZS2RM were recently in hospital for cataract operations and we are glad to hear that they are out again and making good progress.

Congratulations to Gus who is the proud owner of a new TS 130. Gus is at present working on getting his tower up again and will probably be very active on the bands again.

Just a reminder of the three trophies which are available to members of the Branch, the Constructors Trophy, The V.H.F. Trophy and the D.X. Trophy. These will be awarded at the Branch A.G.M. in September, so get going on these projects.

****

DXPEDITION TO REP. of CISKEI 4 - 6 DEC.

A full report on the setting up and operation of the special station operating from Ciskei under the call S42A will appear in next months QSX-PE. There were some very amusing bits - so keep a look out for it.

****

METEOSAT 2 - A BRIEF DESCRIPTION OF THE MAIN WEATHER SATELLITE.

METEOSAT 2 is a geostationary satellite placed into orbit around the Earth to observe weather conditions and to receive and relay data from numerous collection points on the Earth's surface to a ground control station where the data is processed by computer and re-transmitted to the satellite, which then transmits it in picture form to users within its coverage area. The satellite is in orbit at a height of approximately 36ooo KM above the surface of the Earth, at which height it circles the Earth once every 24 hours. As the Earth rotates at the same speed, the satellite stays over the same point at all times. It is situated on the Equator, on the 0 deg. meridian (Greenwich), and its field of view covers the whole of Africa, Britain, a very large part of Europe, and a portion of South America, as well as parts of the Arctic and Antarctic. The view of whole Earth "disk" below the satellite is scanned for the picture information.

The satellite itself consists of a cylindrical housing, 3,195 metres long, and 2,1 metres in diameter. The satellite, at launch weighed 293 kg, but this weight will fall to 245 kg as the hydrazine propellant is used up for position correction during its 5 year lifetime. The satellite spins at a speed of 100 rpm about its main axis, which is aligned almost parallel with the North-South axis of the Earth. The spin is used to stabilise the craft, and also to allow the photographic equipment to scan the Earth below. A smaller cylinder above the main craft body carries an array of dipole antennas for transmission of pictures in the S-band, around 1690 MHz. As the satellite spins, electronics on board switch this array of antennas in reverse order to the direction of spin so that the antennas facing the Earth at any time are activated. This eliminates any fading of signals and polarisation changes. The entire body of the craft is covered by solar cells to generate the power necessary to charge the batteries and power the equipment. There are 16128 N/P solar cells, each 2 cm by 2 cm. These generate 280 watts of power, and the main supply is regulated to 28 volts. The battery consists of 16 Nicad cells in series having a 7 ampere-hour capacity, and these are used only to maintain the supply during the very brief periods that the craft is in the Earth's shadow. The 400 mm radiometer telescope has a step-scan motor synchronised with the satellite spin, with detectors for the three spectral bands utilised. These are : visible, infra-red and water-vapour. The radiometer scans the Earth from an East to West direction as the craft spins, and South to North as the step-motor moves the telescope up a small amount after each spin revolution.

The telescope scans the entire Earth disc every half-hour, taking 25 mins. to scan one complete picture. The data gathered by the sensors is transmitted to the Ground station in Darmstadt, Germany, in digital form at a speed of 166 Kbs^{-1} from the on-board memory. Should the memory fail, the data can be sent at a speed of 2.7 Mbs^{-1}. The craft "sees" the Earth for only 1/20th of a revolution, and the data is sent during the remaining 19/20ths of each spin. Once the data has been processed by the ground computers, it is sent back to the craft, and then disseminated in the form of slow-scan TV to those stations who wish to print pictures of the weather distribution. There are several series of pictures transmitted, i.e. visible of the whole "disc", visible made up of nine pictures of the whole area, giving a much larger scale, and a couple of other visible pictures of specific areas. All these are also sent as infra-red (temperature) and water-vapour content of the atmosphere. Pictures are sent at four minute intervals almost all day and night, with occasional test patterns, and administration messages to advise users of changes to the schedules. The primary channel used is 1694.5 MHz with 1691 Mhz used very occasionally for data to the ground control. There is much more fascinating information available, but it is beyond the scope of this short article. P.S.- The TV weather picture is printed from the raw data as it is being sent to Ground control. This is done at Hartebeesthoek Station.

Many thanks to Brian ZS2AB for this article.

CQ DX CQ DX CQ DX

GALAPAGOS ISLANDS: HC7MD will be very active through 12 December on all bands 160 through 6 meters. Check 1803KHz at 0530z and at his sunrise 1145z.
SOUTH SHETLAND: HFØPOL is active on 14026 KHz at 0100z and 21025KHz at 0200z. QSL via SP5EKZ.
BAHAMAS: K8MFO/C6A is on all bands CW only through 30 November. Try 1805KHz at 0400z and 7005KHz at0600z. QSL via W8TPS.
TRINIDAD: Iris Colvin W6QL has been operating as 9Y4KG at 0425z on 3802KHz. QSLs will be handled by the Yasme Foundation.
KENYA: Kati, JE1JKL will be operating station 5Z4CS on five bands for an extended period on both SSB and CW. QSLS go to JI1VLV.
CROZET: FB8WG can often be found on CW on 14110 KHz around 0300z. There is a list operation run for FB8WG on Mondays and Thursdays on 14225KHz from 1200 to 1230z.
FRANZ JOSEF LAND: UK1PGO will lose operator Sany until next year but the three remaining operators will keep UK1PGO quite active. At UA1PAM operator Slava holds a second class licence and can work SSB only on 10 meters.
HEARD ISLAND: The middle of December is the planned arrival time for the Heard Island Scientific expedition. The Australian amateur who is part of this expedition expects to run high power to dipole antennas.
MACQUARIE ISLAND: VKØAN is active on Thursdays at 0915z on 14333KHz, on 14220KHz after 0630z and on 14225KHz at 1400z. VKØAU is also on Macquarie and is very active.
BURUNDI: 9U5WR is on daily and can usually be found on one of the following frequencies after 2100z. 7012, 14033, 21033 and 28033KHz. QSLs go to SP6FER.
COCOS KEELING ISLAND: VK9NYG has a Monday schedule at 1330z on 28520 KHz. QSL to VK6NE.
GUINEA BISSAU: J5HTL for a short while yet by SM3RL. QSL to SM3CXS.
ANTARCTICA: VP8ANT has been on 1802 KHz and 1826KHz around 0400z.

Many thanks to Lionel ZS2DD for this information which originated from W1AW DX Bulletins transmitted during November.

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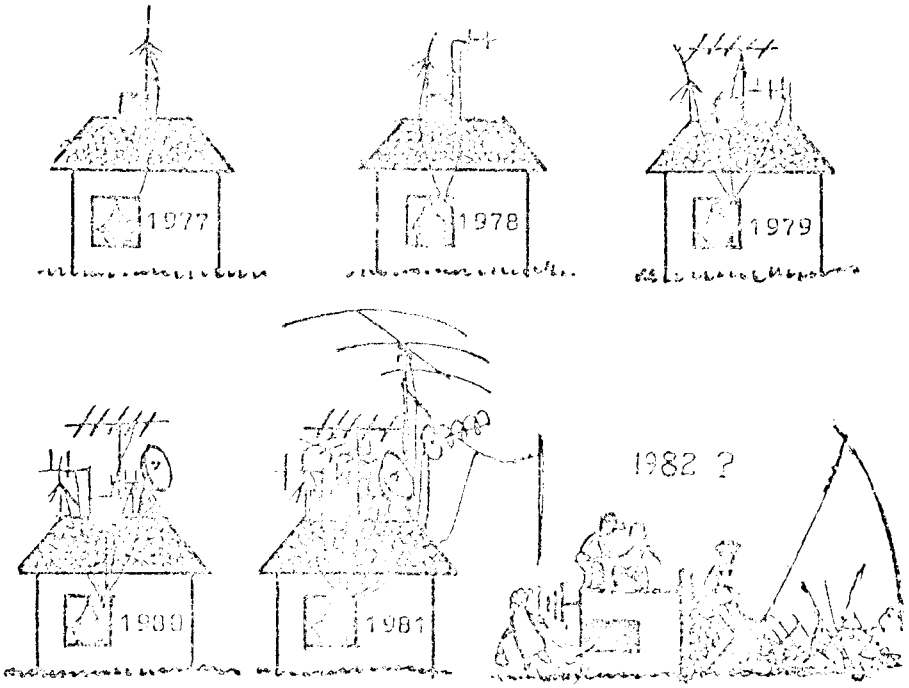

(taken from DL-YL Magazine, YL amateurs, Germany)

In response to a request [illegible] publishing
PRACTICES AND PROCEDURES ON THE TWO METER BAND.
In order to enlighten new licence holders and for the benefit of the O.M.s who may have forgotten [illegible] ham behaviour, we quote a summary of accepted procedures and practices contained in a few handbooks and also from other branch newsletters.
Because of the many users, comments will be limited to F.M. operation, of which two modes are [illegible] interest.
F.M. SIMPLEX OPERATION (two stations working each other direct).
Simplex operation [illegible] confined to the following frequencies:
144,800 to 14[illegible] modes.
145,200 to 14[illegible].
145,425 to 14[illegible].
Use of simplex [illegible] outside these frequencies may result in interference to other [illegible] this being realised.
National call [illegible] should be monitored and used for making contact only. Unless the [illegible] very short, once contact has been made, both stations should [illegible] simplex frequency. This should not be difficult as most [illegible] today are synthesised. It is obvious that if one part[illegible] has only national call as a simplex channel, use of this channel is understandable and acceptable. Overs should be kept short and a pause left between overs to allow any breakers to announce their presence. As soon as a breaker is heard he should immediately be called in. He may have an emergency message and wish to make some short comment. In the event of the breaker wishing to join the QSO he should indicate this and immediately return to the station who called him in Many brahces adopt [illegible] channels and ensure that most members can operate on these frequencies. The most popular is 145,550MHz.
An F.M. repeater [illegible] for greater coverage especially for mobile operation. A repeater [illegible] sited on a high, prominent site with a good coverage of [illegible] area.
F.M. REPEATER OPERATION.
A repeater works [illegible] mobile or distant station transmits on a certain frequency [illegible] receives this signal, transposes it to another frequency [illegible], and then transmits what it is receiving on this [illegible]. The receiving station tuned in to the repeater is [illegible] frequency and thus receives the signal transmitted by the repeater and not the signal originally transmitted by the first station. In this way two stations situated on opposite sides of the repeater and [illegible] line of sight of each other and thus would not be able to [illegible], can communicate with each other through the repeater. A mobile [illegible], if operating simplex, would continually drop out [illegible] by higher terrain, can maintain with the repeater.
Repeaters have [illegible] to a certain extent taken the place of National call 145,500 Mhz. It must however be realised that whereas National call is purely a contact [illegible] repeater is a communication aid and in many cases an EMERGENCY [illegible] CHANNEL. If a station in the QSO cannot communicate with other stations on simplex because of adverse terrain or distance, then it is unreasonable and impractical to expect these stations to attempt a simplex channel.
The following general rules have been accepted as courteous and are listed in order of priority:
1. DO NOT TRIGGER THE REPEATER IMMEDIATELY IT HAS BEEN PUT OVER TO YOU. Allow at least three seconds for any station who wishes to break in. He may have an emergency message.
2. IF THERE IS A BREAKER, THE STATION TO WHICH THE OVER HAS BEEN PASSED SHOULD IMMEDIATELY [illegible] THE BREAKER IN. If the breaker has no emergency message but wishes only to join the QSO he should state this and then return the over to the station who called him in, waiting until all originally in the net complete their overs before taking his turn.
3. WHEN A STATION WISHES TO BREAK INTO A NEW HE SHOULD ANNOUNCE HIS CALLSIGN CLEARLY DURING the pause between overs. After giving his callsign the breaker station should wait until he is called in. Many F.M.

stations give their call signs so quickly that they are totally unreadable. The phonetic alphabet should be used at all time when the call-sign is given and the call sign should be quoted in full.

4. KEEP OVERS SHORT: If all transmissions are kept short, successive overs come around more frequently and ultimately the same total time is spent on the air. This practice allows one more time to think between overs, and hopefully result in more intelligent QSOs. Remember there are more listeners to a repeater than there are to simplex frequencies. Some are not hams and we do not want to create the wrong impression.
5. DO NOT BREAK INTO A QSO UNLESS YOU HAVE SOMETHING TO CONTRIBUTE. In the event of those already on the net desiring additional stations, it is courteous to invite any on the frequency to join in.
6. DO NOT ACTIVATE A REPEATER UNNECESSARILY. To activate a repeater in order to establish whether its transmission will come back is undoubtedly a temptation, but it is irritating to other repeater users. Activate the repeater only if you wish to use it for communication.
   NOTE: It is against the regulations to activate a repeater **without** identifying your station. Remember activating a repeater is a transmission. Equipment should be tested on a dummy load not on a nearby repeater.
7. IF THE REPEATER IS SILENT, AND A QSO IS DESIRED, IDENTIFY YOURSELF BY GIVING YOUR CALL SIGN AND MENTION THAT YOU ARE MONITORING THE FREQUENCY. A short CQ call is acceptable but a long call is unnecessary.
8. WHEN ENTERING THE VICINITY OF A STRANGE REPEATER, MONITOR THIS REPEATER BEFORE WORKING IT. All repeaters have peculiarities. Familiarise yourself with these before activating the repeater.

These few suggestions were born out of courtesy, good manners and the effective use of our equipment. Try to adhere to them and observe how pleasantly we converse.

NOTE: Applicable not only to 2m but on all amateur bands, we should never contravene the regulation. This jeopardises not only the stations own licence but is distressing to other hams.

WHEN ON THE AIR: DO NOT CRITICIZE ANYONE.
DO NOT USE BAD OR OBJECTIONABLE LANGUAGE.
DO NOT DISCUSS BUSINESS.
DO NOT ADVERTISE.

****

At Christmas, the miracle of the manger lives anew. May this holy time bring abundant blessings to you.

International reply coupons

As from 1 October 1981 international reply coupons can again be bought and exchanged at post offices. The new selling price of the coupons is 55c per coupon and each coupon received from abroad can be exchanged for postage stamps to the value of 15c.

CLEARLY the post office still has a morale problem. Noticed on a Johannesburg PO panel van the following slogan: "Cheer up. Things could be worse. You could have my job!"

****

BULLETIN ROSTER.

20th December	Brian ZS2AB	303498
27th December	Marge ZS2OB	303498
3rd January	Frank ZS2CY	511259
10th January	Colin ZS2AO	312471
17th January	Fred ZR2DQ	32429(0422)

Please let the bulletin reader know any news or items of interest. They will be most grateful. The best time would be on Saturday when the bulletin is being prepared. Thanks.

****

A STRANGE STORY.

It has been reported that Microwave ovens are jamming the space-tracking system at Jodrell Bank, Cheshire, England. Sir Bernard Lovell, Director of the radio telescope base says British housewives are being sold Microwave ovens of poor quality. They are badly constructed and play havoc with reception from space. Regulations governing the use of radio frequencies, such as those emitted by the ovens, are often difficult to enforce says Sir Bernard.

The ovens are licensed to operate outside protected bands, but are so poorly constructed, they emit radio frequency energy far outside their assigned bands.

If used within a few miles of the telescope, they cause havoc to the reception of the very low intensity signals from space.

Many of the microwave cookers on sale in Britain are so bad, they can cause cancer and their manufacture would be banned in America and Russia.

Space vehicles tracked by the telescope transmit on reserved bands, but difficulties have arisen, because of the sensitivity of the radio telescope.

Sir Bernard has urged the Cheshire Council to restrict development in the area of Jodrell Bank, to continue its protection.

A spokesman for a microwave oven manufacturer said that he was surprised by Sir Bernard's remarks. He said "We sell a good many ovens, and they are meticulously checked for radiation leakage. We have not had a single complaint on this score. The ovens are perfectly safe, provided they are kept clean".

Ack. to Y.L. Beam.

****

COMMITTXX'S LAMXNT.

This typxwritxr works quitx wxll xxcxpt for onx kxy. Somxtimxs it sxxms to mx that our branch is likx this typxwritxr; not all thx kxys arx working propxrly. You may say "Wxll, I am only onx pxrson. It won't makx much diffxrxncx". But you sxx, for thx Branch to bx xffxctivx, it nxxds thx activx participation of xvxry mxmbxr. So, thx nxxt timx you think your xffort is not nxxdxd, rxmxmbxr this typxwritxr and say to yoursxlf: "I am a kxy pxrson and nxxdxd vxry much".

****

Two clerical gentlemen engaged in conversation. Says one: "This metrication - how will it affect the Twelve Apostles?".

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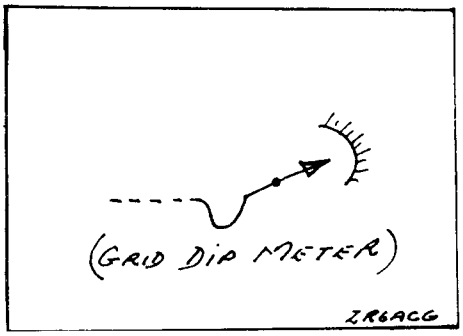
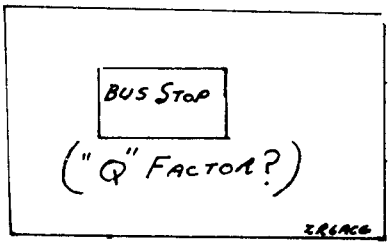
Congratulations Sir.
you're the first driver
to use our new electronic
breath-tester!



An optimist is a person who smiles to forget. A pessimist is a person who forgets to smile.

If at first you don't succeed ..... try a linear.



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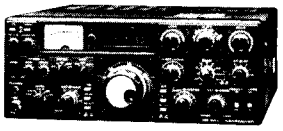
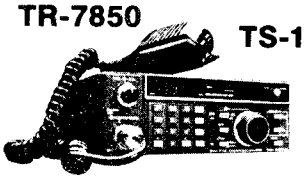
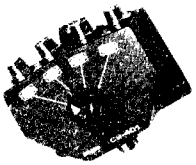
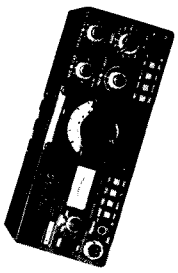


TR-7850



TS-130S

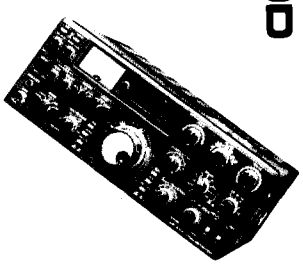


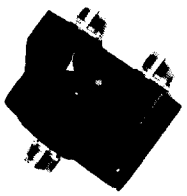


'n Gesëende Kersfees
en 'n
Voorspoedige Nuwe Jaar.

A merry Christmas
and a
Prosperous New Year.

KENWOOD





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