

# **WATTS** 12-2011 Year 81 + 12m

Monthly newsletter of the Pretoria Amateur Radio Club Maandelikse nuusbrief van die Pretoria Amateur Radio Klub.

 PARC, PO Box 12602, Die Hoewes, 0163, RSA

 web
 http://www.parc.org.za

 mail:
 zs6pta@zs6pta.org.za

 Bulletins:
 145,725 MHz
 08:45 Sundays/Sondae

 Relays:
 1.840, 3.700, 7.066, 10.135, 14.235, 51.400, 438.825, 1297 MHz

 Activated frequencies are announced prior to bulletins

 Swapshop:
 2m and 7.066 MHz

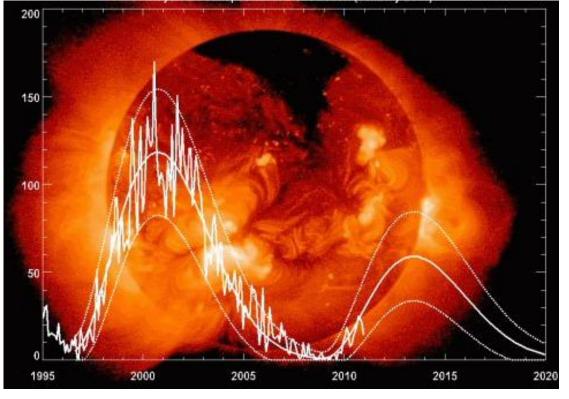
 Live on-air after bulletins

 Bulletin repeats Mondays | herhalings : Maandae 2m 19:45

## $\sim$

## **Cycle 24 Sunspot Prediction:**

The current prediction for Sunspot cycle 24



gives a smoothed sunspot Number maximum of about 89 in May 2013. We are now almost 3 years into Cycle 24. Increased activity in the last few months has raised the predicted maximum above the 64.2 for the Cycle 14 maximum in 1907. The current predicted size still make this the smallest sunspot cycle in over 80 years.

## In this issue

### In hierdie uitgawe

- Member news and activities Lede-nuus en Aktiwiteite
- This and that

t Tegnies

- Technical Military Phonetic alphabet Which SWR are you reading?
- Page eight

Bladsy agt

Next fleamarkets and socials 2012

25 Feb 2 June 1 Sept 8 Dec

Venue: PMC, Silverton

## PARC Management team / Bestuurspan Aug. 2012 - Aug. 2013

Committee members

Chairman, SARL liaison Vice Chairman, Fleamarket, PR Treasurer, repeater maint. Rallies, Social Webmaster	Pierre Holtzhausen Alméro Dupisani Andre van Tonder Johan de Bruyn Graham Reid	ZS6PJH ZS6LDP ZS6BRC ZS6JHB ZR6GJR	chairman@zs6pta.org.za fleamarket@zs6pta.org.za andreh.vtonder@absamail. rally@zs6pta.org.za webmaste@zs6pta.org.za	012-655-0726 012-567-3722 <u>co.za</u> 361-3292 012-803-7385	082-575-5799 083-938-8955 082-467-0287 082-492-3689 083-701-0511
Co-opted/Geko-opteer:					
Auditor Secretary WATTS newsletter/Kits Repeaters, Technical Clubhouse Club contesting Training Historian, Awards	Elma Basson Jean de Villiers Hans Kappetijn Craig Symington Pending Sander Wissing Fritz Sutherland Tjerk Lammers	ZS6ARA ZS6KR ZS6RH ZS6SSW ZS6ASF ZS6P	zs6ara@webmail.co.za editor@zs6pta.org.za technical@zs6pta.org.za sander.wissing@gmail.com training@zs6pta.org.za zs6p@iafrica.com	012-663-6554 012-333-2612 012- 012-811-3875 012-809-0006	083-627-2506 072-204-3991 081-334-6817 083-304-0028

From the Editor and Management

A Blessed Christmas



It is difficult at the time of writing to realize that the Festive Season is soon upon us. The January issue of Watts will probably appear after Christmas. **The Management Team of PARC will now take the opportunity to wish you and your loved ones a Blessed Christmas and Happy New Year.** May there be new inspiration for the future through the Message and real meaning of Christmas for all. We also wish our Jewish members a happy **Chanukah.** 

#### Vanaf die Redaksie en Bestuur

'n Geseënde Kerstees



Dit is moeilik om nou ten tye van hierdie skrywe te besef te dat die Feesgety alreeds baie naby is. Die Januarie uitgawe van WATTS sal waarskynlik eers na Kersfees verskyn. **Die Bestuurspan van PARK** wil nou van hierdie geleentheid gebruik maak om u en u geliefdes 'n geseënde Kersfees en Gelukkige Nuwe Jaar toe te wens. Mag daar nuwe inspirasie vir die toekoms deur die Boodskap en ware betekenis van Kersfees vir u almal wees.

### **Happy Holidays**

A first aid kit can be used for treating a grazed knee, or mean the difference between life and death. It is fundamentally important that your household, workplace and car have a first aid kit on hand.

Make sure that your first aid kit includes the following:

- □ Antiseptic liquid
- □ Cotton swabs, cotton wool, gauze
- □ Scissors
- □ Safety pins
- □ Bandages
- □ Latex gloves
- □ CPR mouth piece
- □ Plasters
- □ Tweezers
- □ Thermometer
- □ Antihistamine Cream

Your first aid kit should also include information on CPR, the Heimlich Manoeuvre and emergency telephone numbers.

### DON'T LOSE YOUR MOBILE RIG





- 02 Antoinette ZS6D, sw of Danny ZS6AW
- 04 Wynand, seun van Wynand ZS6ARF
- 06 Sylvia, sw van Tjerk ZS6P
- 07 Hansie ZS6AIK
- 08 Hans ZS6KR
- 15 Don ZS6AQS
- 15 Almero ZS6LDP
- 17 Dominic, seun van Hans ZR6HVG
- 21 Retha, sw of Roy ZS6XN
- 22 Steven, son of Bill ZS6KO
- 23 Niel ZR6AUK, son of Marieta and Roy ZS6MI
- 28 Allan ZS6AVC, son of Frances ZR6AUT

## Des. Anniversaries Herdenkings

- 19 Ceciel en Flip ZS6BSO (47)
- 22 Rita and Vitor ZS6VG (32)
- 29 Molly ZR6MOL and Richard ZS6UK (35)
- 29 Ricky, son of Rita and Vitor ZS6VG
- 30 Rika, sw of Errol ZR6VDR
- 30 Corrie, lv van Bridge ZS6BJM
- 30 Juan, seun van Marilize ZS6MUD en Pierre ZS6BJM
- 31 Henk ZS6CS

### Joys and Sorrows | Lief en Leed

**Viv Prince ZS6BZS** passed away peacefully on 13 November at the age of 77. He was a long standing club member and honorary member in his latter years. Many of us knew him as "the big ZS" always helpful on the repeater to lost travellers and errant hams. Our sincere condolences go out to the remaining Prince family.

Pieter ZS6SPY en Brinette ZS6MZA trek na Denysville. Voorspoed en ons sal hopelik nog van julle hoor.

Phil ZS6PHL sw of Craig ZS6RH has recently passed the RAE. Congratulations and we hope to hear her often.

**Suzette ZS6SZT** het op Donderdagaand 3 November haar Meriete Funksie gehad by haar skool. Sy het sertifikate ontvang vir Geskiedenis, Engels Tweede Taal, Afrikaans Huistaal, Lewenswetenskappe, Rekenaartoepassingstegnologie, Verbruikersstudie, Akedemiese Balkie vir Graad 12 en Erekleure vir 3 Jaar Top Presteerder in die Grade, 10, 11 en 12. Dan het sy ook trofeë ontvang vir die bogenoemde vakke en sy het ook trofeë gekry as die Dux Leerling vir Graad 12. So sluit dan ook haar skoolloopbaan op 'n hoë noot af. Volgende jaar gaan sy Belgium ITVersity toe waar sy in Rekenaarwese gaan studeer. Sy is reeds ingeskryf en begin op 24 Januarie 2012 daar studeer.

#### Diary | Dagboek (UTC times) Dec.

03 West Rand fleamarket

Jan.
 Last day for submission of nominations of Council members and motions for the 2012 SARL AGM.

### **Snippets | Brokkies**

The 439.025 MHz link in the North was recently reinstated and works well. Use it north of the Magaliesberg.

6m is showing DX activity. Listen on the calling frequency 50,110 MHz.

EME news by Pine ZS60B will from now on also be published on the VHF/UHF page on our website.

Two dollar note of note. Received by ZS6KR in lieu of return postage. This is not a fake or gimmick but apparently a means of



tracing its wanderings if recipients are willing to post its destination on the website "WheresGeorge".

To date however the website was not available and may have been discontinued.

Google does list this effort as well.

### PARC summer fleamarket at PMC ----- Early birds got some good bargains

Trading got off to a good start as early as 07:30 although major attendance only built up later. There were fewer sellers than expected but a good amount of eyeball QSO's were made with old friends in the pleasant PMC environment.



Letter	1913	1927	1938	World War II	1957-Present
A	Able	Affirmative	Afirm	Afirm (Able)	Alfa
в	Boy	Baker	Baker	Baker	Bravo
С	Cast	Cast	Cast	Charlie	Charlie
D	Dog	Dog	Dog	Dog	Delta
E	Easy	Easy	Easy	Easy	Echo
F	Fox	Fox	Fox	Fox	Foxtrot
G	George	George	George	George	Golf
н	Have	Нуро	Нуро	How	Hotel
I	Item	Interrogatory	Int	Int (Item)	India
J	Jig	Jig	Jig	Jig	Juliett
К	King	King	King	King	Kilo
L	Love	Love	Love	Love	Lima
М	Mike	Mike	Mike	Mike	Mike
N	Nan	Negative	Negat	Negat (Nan)	November
0	Oboe	Option	Option	Option (Oboe)	Oscar
Ρ	Pup	Preparatory	Prep	Prep (Peter)	Рара
Q	Quack	Quack	Queen	Queen	Quebec
R	Rush	Roger	Roger	Roger	Romeo
S	Sail	Sail	Sail	Sugar	Sierra
т	Tare	Tare	Tare	Tare	Tango
U	Unit	Unit	Unit	Unde	Uniform
V	Vice	Vice	Victor	Victor	Victor
W	Watch	William	William	William	Whiskey
х	X-ray	X-ray	X-ray	X-ray	X-ray
Y	Yoke	Yoke	Yoke	Yoke	Yankee
z	Zed	Zed www.Stra	Zed	Zebra	Zulu

### 10m band under siege



A recent issue of the IARU Monitoring System newsletter reports that the intruder situation on 10m is getting worse as the MUF continues to rise in Solar Cycle 24.

The report said that it found much CBlike traffic using AM, FM and SSB on 28 to 29,7 MHz in September and October 2011. Europe, Brazil and the Far East are the primary originating points for most of the illegal 10m traffic. It goes on to say that the band is also still filled with numerous taxi cabs on 10m FM.

With conditions on the upper HF bands improving we could soon witness what it calls the "apocalypse" on the amateurexclusive 10m band. The newsletter also describes interference on the 24 MHz band from Codar Radar and numerous "CB" operators operating there as well.

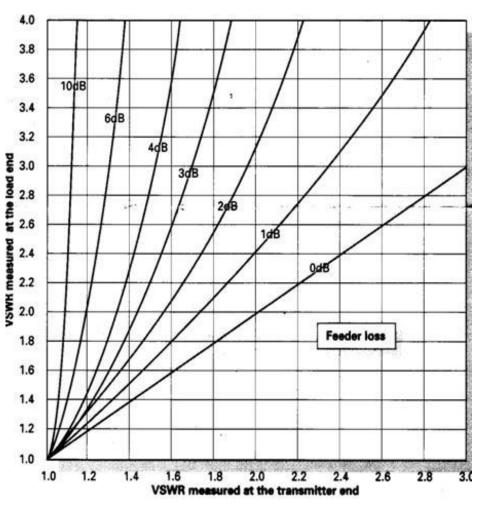
Last week Russia agreed to do all it can to remove illegal taxi radio operators from the 10m band but just how successful that move will be remains to be seen.

### Your SWR meter may not tell the truth.

This is rather an old subject but the illustrations here from an old Practical Wireless should be very clear for even the non-technical.

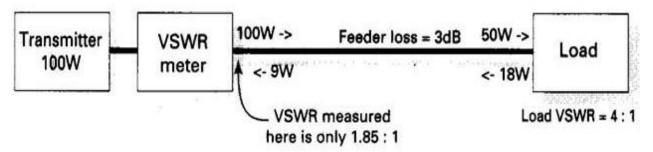
The curve- and axes values illustrate that if your feeder is not ideal, you will have losses and your SWR meter down in the shack will show an optimistic SWR lower than the real SWR at the antenna.

Strive for zero loss by using the shortest and / or low loss feeder cable. *Note that the SWR values are only the same at the source and load when loss=0dB* 



When transmission line losses are negligible, the VSWR may be measured at any convenient point on the line. However, when measurements are taken at the transmit end of the system, a lossy feeder will tend to mask the effects of poor VSWR at the antenna end and, the VSWR will look better than it actually is..

The above graph shows how measured VSWR (at the antenna) will be greater than the VSWR measured at the transmit end and the ratio will vary with line loss.



Example:

The transmit power is 100W, feeder losses are 3dB. Only 50W arrives at the load (which has a termination VSWR of 4:1). So, 36% of the 50W (18W) is reflected back (of which a further 9W (50%) is lost before reaching the measurement point. The forward and reflected (measured) powers give an apparent VSWR of 1.85:1, and not the actual value of 4:1.

### **Operating Portable for Jamboree on the Air**

### Roger ZS6RJ

The one thing about amateur radio I'll never forget is my very first exposure to the hobby. Many thousands of hams world-wide have been introduced to this hobby via JOTA, and I'm one of them. It was a magical day for me, back in 1983. I was 15 years old at the time and was dragged along to the Pretoria Lynwood scouting event by my ever-optimistic best school-mate, who being a scout, entertained deluded notions of persuading me to join his troop so I too could "be prepared". Even back then, my version of being prepared included owning a box of matches rather than furiously rubbing two sticks together...

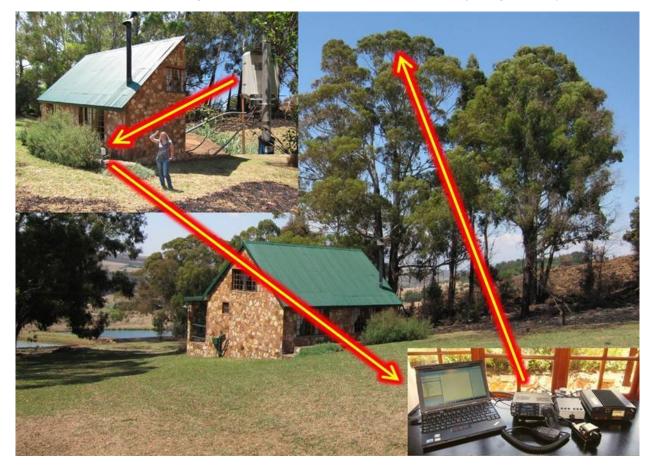
But I digress. The magic began for me when I spotted what turned out to be Don, ZS6AQS glued to a radio. He was hunched over a TS-180S talking to other people who rub sticks together in different countries, with a radio that appeared to be connected to nothing else than trees. Instant fascination ensued (with the buttons on the radio, not the international stick-rubbing QSO's...) that has endured through until today. I never joined the scout troop, but I did join the PARC that year!

As the years passed I tended to specialize in the aspects of the hobby that interest me most (CW/antenna design) and forget about the rest, as a lot of us do. Fun yes, but it won't end up attracting kids to the hobby. So every year I try to get involved with JOTA in one form or another. And I always stick to "wire in the trees" in memory of my first glimpse into the hobby. This year, I found the perfect spot – the picture says it all.

A trout farm in Dullstroom, and a cottage at an altitude of 2 000 metres right next to enormous blue gum trees. This allowed me to fire a sinker with a "kettie" and fishing line over a branch around 23 metres off the ground, and pull up a 30 metre long wire. You can also see my unique RF indicator (aka my XYL) hanging on the lower portion of the long wire in the photo. When she screams, I know I'm getting RF out. The higher the scream-pitch, the closer I am to a 1:1 match... This combined with the current good conditions on HF made for a wonderful JOTA weekend.

In all I had QSO's with around 17 local Scouts, girl-guides, Voortrekkers, scoutmasters, and attendant hams in South Africa ranging from Arrow Park in Gauteng, to Natal and the Cape, as well as several international JOTA QSO's. Aside from this, I had several other interesting QSO's, including one with Hans, VK2PEL/MM on 40 metres who was cruising from Vilanculos to Richard's Bay during his circumnavigation. Both CW and SSB QSO's were abundant on all bands from 80 through 10 metres, using only the tree, the XYL, an AH-4 tuner and an IC-7000. Many QSO's were also worked in the WAG contest. Lots of those QSO's were made via battery power to cater for frequent power cuts and as an excuse to take a table outside and enjoy the great weather.

In my book nothing beats quietly working CW at night outside under your chosen tree while watching shooting stars and satellites perform overhead in the middle of nowhere. Back-to-basics for a worthy cause like JOTA is a special experience. But I'm still sticking to matches for the braai, hi. I also caught more QSO's than trout, but that's because most of my fishing line was up in the tree...



### **Recent Rally glimpses**







These photos were taken at Zonderwater where a vehicle caught fire and attendants with fire extinguishers soon had it out.

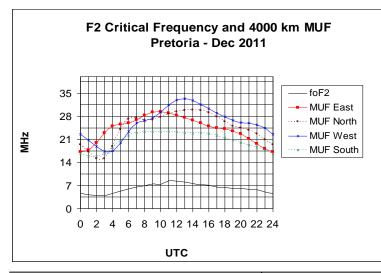
#### Below:



Picture sneaked of someone's portable comms set-up.

Maybe we should all think of what has been propagated by Eddy ZS6BNE and his RADAR (Rapid Deployment Amateur Radio) activity. Ideally an all-band radio, battery and a wire - or fold-up antenna.





### Long Term HF Propagation Prediction for Dec 2011 Courtesy ZS6BTY

(see also our website propagation tab)

#### DX Operating

The graph shows the 4000 km maximum useable frequency (MUF) to the East, North, West and South from Pretoria for the first hop using the F2 layer.

#### Local Operating

The F2 critical frequency (foF2) is the maximum frequency that will reflect when you transmit straight up. E-layer reflection is not shown.



