

ZS6JPL

Drukwerk

printing

**WATTS** 05-2012

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

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

## ZS6JPL

The Titanic radio story. | The only known photograph of Titanic's Marconi room.

The Titanic's call sign was MGY, and of the most famous radio messages in history was the SOS sent from the Titanic's radio room on the night of April 14-15, 1912. Read about the confusion that cost many lives p.5



#### In this issue

## In hierdie uitgawe

- Member news and activities Lede-nuus en Aktiwiteite Subscription renewal notices
- The Titanic Tragedy:
- sunk between CQD and SOS Technical Helpful ideas
- Page eight

Bladsy agt

### Next fleamarkets and socials 2012

2 June

1 Sept

8 Dec

**Venue: PMC, Silverton** 

## PARC Management team / Bestuurspan Aug. 2011 - Aug. 2012

Committee members

Chairman 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	zs6pjh@telkomsa.net almero.dupisani@up.ac.za andreh.vtonder@absamail zs6jhb@qmail.com greid@wol.co.za		082-575-5799 083-938-8955 082-467-0287 082-492-3689
Co-opted/Geko-opteer:					
Auditor Secretary SARL liason WATTS newsletter/Kits Repeaters, Technical Clubhouse Club contesting Training Historian, Awards	Tony Crowder Jean de Villiers Jan Pienaar Hans Kappetijn Craig Symington Richard Peer Sander Wissing Fritz Sutherland Tjerk Lammers	ZS6CRO ZS6ARA ZS6OB ZS6KR ZS6RH ZS6UK ZS6SSW ZS6ASF ZS6P	tcrowder@telkomsa.net zs6ara@webmail.co.za pienaarja@qmail.com zs6kr@wbs.co.za zs6rh@hotmail.co.za zs6uk@peer.co.za sander.wissing@qmail.com fritzs@icon.co.za zs6p@iafrica.com	011-672-3311 012-663-6554 012-333-2612 012-333-0612 1 012- 012-811-3875 012-809-0006	083-627-2506 082-447-7823 072-204-3991 081-334-6817 082-651-6556 083-304-0028

#### Your Licence Fee is Due Now

ICASA has started mailing license renewal notices.

The license fee of R120.00 is due on **1 April 2012**. You may also renew for five years at a reduced fee of R501.00.

If you do not receive a renewal notice, the SARL recommends that you pay by using the license number on last year's invoice and your call sign.

Also, mail the payment notification plus your address to KMashile@icasa.org.za.

It is essential that in all payments to ICASA that you include your call sign as a payment reference. Remember to send any postal and e-mail address changes to <a href="mailto:admin@sarl.org.za">admin@sarl.org.za</a>

From a discussion on the SARL Forum regarding the new license structure Peter ZS5PL (<a href="mailto:pleonard@ICASA.org.za">pleonard@ICASA.org.za</a>) has access to records and can help with various enquiries besides the advertised <a href="mailto:kmashile@icasa.org.za">kmashile@icasa.org.za</a>)

Something not mentioned officially until it was stated on the Forum by Peter is that there are other options as from 31/03/2012 besides the 5-year option:

1 year - R120.00 2 years - R230.00 3 years - R329.00 4 years - R419.00 5 years - R501.00

Currently it has been observed that when having paid for multiple years the paper license will reflect the expiry date still as for one year only but you will receive a new one every subsequent year.

## SARL Subscriptions Due 1 July

Ordinary member R380 Licensed Senior member R225 (retired persons over 65) Family member R125 R70 Spouse or dependent of a member Student member R60

#### Be an early bird!

#### PARC SUBS / LEDEGELD 30-06-2011

Please remit your subs in time to our treasurer or by transfer to:

Betaal asb. u ledegeld betyds aan ons tesourier of per oorplasing aan:

Bank : FNB Ordinary members/ gewone lede R150
Branch : 25 20 45 Spouses, pensioners R50
Account : 546 000 426 73

Your call sign must appear as statement text! !

## Birthdays May Verjaarsdae

- 01 Amanda, dogter van Martie en 'JB' ZR6YV
- 02 Chris ZS6LOG
- 06 Lourens ZS6KRT
- 10 Roy ZR6RV, son of Marieta en Roy ZS6MI
- 11 Zdena, sw of Ivo ZS6AXT
- 14 Johannes ZS6BPB
- 17 Vince ZS6BTY
- 18 Karen, daughter of Pat ZR6AVC and Frank ZS6GE
- 23 Lily, sw of Harry ZS6AMP



## Mei Anniversaries Herdenkings

04 Ronel en Pieter ZR6PSR ( )

- 26 Jannie ZR6PHD
- 26 Vitor ZS6VG
- 28 Flip ZS6BSO
- 31 Gawie ZS6GJJ (80)
- 31 Dave ZS6JW (88)

## **Joys and Sorrows | Lief en Leed**

Pierre **ZS6PJH** QTH had a burglary – no details yet.

## Diary | Dagboek (UTC times)

#### Mav

05-06 10-10 International CW Contest 00:01-23:59

19-20 His Majesty King of Spain Contest 12:00-12:00

19-20 Baltic Contest 21:00-02:00

26-27 CQWW WPX CW Contest 00:00-23:59

27 SARL Digital Contest 13:00-16:00

## **New Members | Nuwe Lede**

Mario Brazzoli ZR6UV Centurion

Hendri Ehlers **ZS6HFE** Bronkhorstspruit

Gideon Bothma **ZS6BZT** Pta Noord

#### **Snippets | Brokkies**

**Roy ZS6MI** just completed another tower. He is a bit secretive as to what is on it but we can guess it is pretty high frequency..

Are the other structures attracted to it or is it just camera distortion?

#### Trophies awarded at the SARL AGM

Club members were awarded some coveted trophies at the SARL AGM Awards Dinner:

**ZS6P:** Willie Wilson Gold Badge for exceptional and meritorious service to the SARL

**7P8EME team :** Icom Excellence Award for their excellent technical effort and performance.

**ZR6LHT/7P8LHT:** Bert Buckley 6m Trophy for outstanding work on 6m during the 7P8 expedition.

**ZS6PA:** JJ Pienaar Trophy for the best article published in Radio ZS during the last year.

**ZS6RJ:** Silent Keys Memorial Keys Trophy CW for achieving the highest score in the last SARL HF Contest.

**ZS6KR:** HOS Trough for the highest aggregate in both the CW and Phone SARL Contests last year.



## The Titanic Tragedy

http://www.astrosurf.com/luxorion/qsl-ham-history-titanic.htm

#### Sunk between CQD and SOS

On Monday, April 15, 1912, at 12:30 AM, in the middle of the night, the R.M.S. Titanic struck an iceberg in the N. Atlantic near Canada and sank at 41°46' N, and 50°14' W. Thanks to wireless, 745 passengers were saved but 1595 died in this tragedy among them some of the most prominent persons in the world.

Behind this disaster, it was argued that the number of survivors could have been doubled or even tripled, if there were stronger wireless regulations in effect.

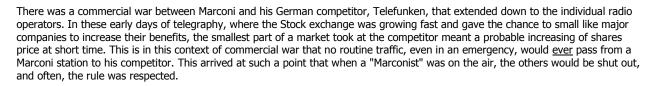
Indeed, if we focus on the sole radio transmission issue, at least three problems appeared and increased the slow response of rescuers.

First, the radio operators were only on duty during the "open hours", thus only at daytime. Any event could thus occurred at night without warning.

Then, in 1905, the Morse code "SOS" (that does not mean Save Our Souls) was

adopted by German ships for signifying distress while the British marine, working with Marconi operators, wanted to keep CQD (General Call Disaster that some translated by Come Quick Disaster) as a distress signal. It was first decided to use SOE, but the small "E" dot can easily be lost in QRM and one suggested to replace it with an S, as in repeating three time the small dot the operators had much more chance to arrest the attention of anyone hearing it, hence SOS, that was adopted at the Berlin Radiotelegraphic Convention in 1906 as the official international standard for distress calls. But Marconi operators were slow to conform, and until 1907 Marconi companies continued to work with the "CQD", associating it if necessary to SOS.

The first time an emergency SOS signal was used was on June 10, 1909 when the liner "SS Slavonia" wrecked off the Azores.



This story is interesting to recall because it emphasizes the problem of security aboard the ship, and the lack of a standard wireless regulation. Here is the all story shortened to the essential messages. In all, some 28 ships were involved in communications with Titanic. The rescue last 8 hours between the first distress call and the last passenger rescued. Only the "Carpathia" rescued all the passengers and processed to New York, a trip that lasted still two and a half more days.

#### The scandalous secret story revealed

In this night of April 15, 1912, the Marconi station onboard the "MGY" vessel, the radio callsign of the Titanic, was operated by two wireless operators, 25 year old John George Phillips - better known as "Jack" or "Sparks", and 22 year old Harold Bride as the Deputy or Assistant Radio Operator, two employees of the Marconi Telegraph Company. Jack Phillips could tap out 39 words per minute, ditto that for Harold Thomas Cottam ("Carpathia's" wireless operator), and Harold Bride's reached 26 words per minute.

They were passing a routine traffic by 11.45 PM when the Captain Smith came in informing Phillips and Bride that the ship had hit an iceberg, and to prepare a distress call.

At 12:15 AM the captain returned at the radio room and told the operators to send the message. Phillips sent in his spark gap transmitter: "CQD Titanic 41.46 N 50.24 W" when Bride interrupted him: "Send S.O.S.! It's the new call and it may be your last chance to send it'. But faithful to Marconi's rules, Phillips continue sending CQD.

At the same time, ship "La Provence" received the distress message requiring assistance. Ship "Mount temple", MLQ, heard also the CQD and requested "Titanic" to give again her position. Drown in the noise of the stream, Philips and Bride checked the ship position. "Cape Race", MCE, heard "Titanic" sending back her new coordinates: "41.44 N 50.24 W". Then ship "Ypiranga" heard 'Titanic" calling CQD during about 10 minutes without establish any contact.

The situation worsening, at 12:25 AM Phillips sent to any ship in their vicinity a new message. The Cunar Liner "Carpathia", MPA, hears a CQD saying: "Come at once. We have struck a berg. It's a CQD OM. Position 41.46 N 50.14 W". Immediately "Cape Race" called "Titanic" but received no reply.

"Titanic" sent a new call: "MGY CQD, Here correct position 41.46 N. 50.14 W. Require immediate assistance. We have collision with iceberg. Sinking. Can hear nothing for noise of stream". Titanic called so during about 15 to 20 minutes to "Ypiranga".

Meanwhile, at 12:30 AM "Mount Temple" heard "Titanic" still calling CQD. His Capitain "reversed ship". She was about 90 km (50 miles) off "Titanic". After a lot of misunderstanding between ships, at 12:32 AM "Carpathia" answered to "Titanic": "Putting about and heading for you".

At 12:45 "Olympic", MKC, the sister ship of "Titanic" located 800 km (500 miles) away en route to England heard "Titanic" sending "CQD CQD SOS Titanic. Position 41.44 N 50.24 W.". But it seems that "Olympic" didn't answer or didn't hear her call. According the transcript this is the first time that "SOS" was sent, so half an hour after the accident and the request of Bride!

Note that Harold Bride testified in both the American and British investigations (see below) and in his original accounts of the sinking, that Phillips sent the CQD and SOS calls at 15 word-per-minute so that everyone would be sure to understand the message as there was language problems with some of the other ships.

While "Titanic" was slowly sinking, Phillips continued so to send CQD, his position, explaining again that "Titantic" stuck an iceberg, etc. This dramatic comedy last another half hour.



exhibited at the American Radio

Museum at Bellingham, WA., USA.

At 1:15 AM "Baltic", MBC, asks "Caronia", MSF, to: "Please tell Titanic we are making toward her".

At 1:20 AM "Virginian", MGN, heard "Cape Race" informing "Titanic": "that we are going to his assistance. Our position 170 miles N. of Titanic." 5 minutes later "Caronia" tells "Titanic": "Baltic coming to your assistance."

As soon as the wireless operator informed his captain, the "Carpathia" and "Cape Race", chimed in their acknowledgement of the disaster call. But these ships were still hundreds of kilometers away and the "Titanic" continued to send desperately his "CQD" and "SOS" messages.

At 1:25 AM at the requests of "Olympic": "Are you steering southerly to meet use", "Titanic" replied: "We are putting the women off in the boats." Phillips repeated this message two minutes later.

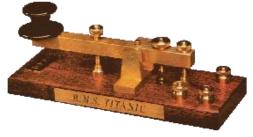
At 1:30, "Titanic" sent again: "We are putting passengers off in small boats."

At 1:35 AM "Olympic" asked "Titanic" what weather she had. "Titanic" replied: "Clear and calm.". Then the German Liner Frankfurt", DFT, asked "Titanic": "Are there any boats around you already?" Titanic didn't reply. The reason was simple, even if according your modern rules that looks incredible: the "Frankfurt" operator worked for Telefunken, the main competitor of the Marconi company!

At 1:40 AM "Cape Race" said to "Virginia": "Please tell your Captain this: The Olympic is making all speed for Titanic, but his [Olympic] position is 40.32 N. 61.18 W. You are much nearer to Titanic. The Titanic is already putting women off in the boats, and he says the weather there is calm and clear. The Olympic is the only ship we have heard say, "Going to the assistance of the Titanic. The others must be a long way from the Titanic."

At 1:45 AM "Carpathia" heard one of the last message sent by "Titanic": "Come as quickly as possible old man: our engine-room is filling up to the boilers".

At 1:48 AM "Asian", MKL, heard "Titanic" calling "SOS". She answered but received no reply. The "Frankfurt" operator came back also to get more information and asked to "Titanic": "What is the matter with u?". "Caronia" heard "Frankfurt" working the "Titanic" but it was still 275 km (172 miles) away.



Replica of the straight key used on the Titanic.

At 1:50 AM on the "Titanic" Phillips tapped back to "Frankfurt": "You are a fool, stdbi stdbi stdbi and keep out". Unfortunately the commercial war edicted always its own rules! At this moment the "Frankfurt" was still at 277 km (172 miles) from 'Titanic". It needed hours to reach her.

Phillips continued to transmit information for about half an hour to other ships, but mainly to the "Carpathia", and "Olympic". The "Carpathia" operator took the time to transmit the list of survivors to the "Olympic", then he closed his radio station, keeping a radio silence and refusing even to answer to Navy cruisers sent to the scene by President Taft.

At 2:00 AM "Virginian" still heard "Titanic" calling but this time her emitting power began greatly to reduce.

At 2:10 "Virginian" still heard two weak "v" surrounding with sparks. One thinks that Phillips tried adjusting his transmitter to compensate for the dying power supply from the engine room. "Titanic" began to take on water in her first five compartments. Orders were given to the crew to uncover the lifeboats and to get all hands on deck. But the lifeboat capacity was only enough for about half of the 2,340 people on board... It was thus decided to give the priority to leave the ship to all women and children...



Harold Sidney Bride (left), assistant radio operator and John George Phillips (right), first radio operator. Phillips had to die of hypothermia.

By 2:15 AM or so, Phillips sent another message: "SOS SOS CQD CQD Titanic. We are sinking fast. Passengers are being put into boats. Titanic". "Virginian" heard it but was unable to read it correctly.

At 2:17 AM, Phillips was intended to send a last "CQD DE MGY" that was partly hear by the "Virginian", when him and Bride were urged to leave their post by Captain Smith. After the loss of all power in "Titanic"s radio room, "Virginian" noticed that "Titanic"s signal ended very abruptly.

Bride and Phillips left the wireless room and made their way to the Boat-Deck, and began trying to help the other men in the releasing of collapsible Lifeboat B. While neither of them immediately made it onto a lifeboat, both were rescued from the sea. Bride's feet were so severely frozen he could no more walk. Phillips died of hypothermia on or near Collapsible lifeboat B. His body was never recovered.

Pretty soon, the "Titanic" lights flickered, and then totally went off, leaving everyone on the ship, and in the lifeboats, with total darkness. As the stern rose, it stood almost to a 90 degree angle. People on the ship grabbed for anything to hang on to. A weak spot developed between the third and fourth smoke stack, which caused the stern of the ship to break off but the stern rested in the water in the normal position. After about a minute, the stern was over taken by water, and slipped into the sea.

In less than two hours 1595 passengers died of hypothermia or drowned, and the so-called unsinkable "Titanic" sank by 3810 m (12600 ft) deep at 724 km (450 miles) south-east of Halifax. 745 survivors huddled in half filled lifeboats waiting to be rescued.

Once arrived on site, at 4:10 AM the "Carpathia" picked up the first survivors and immediately sent a wireless message to other ships. At 8:10 AM the last lifeboat was rescued by the Carpathia.

At 8:55 AM "Carpathia" replies to "Baltic": "Am proceeding to Halifax or New York full speed. You had better proceed to Liverpool. Have about 800 passengers on board."

At 9:00 AM "Carpathia" sent a last message from the accident area to "Virginian": "We are leaving here with all on board about 800 passengers. Please return to your Northern course."

However other wireless messages appeared alleged transmitted from "Carpathia", like this one that stated: "All passengers of Liner 'Titanic' safely transferred to this ship and 'S.S.Parisian'. Sea calm. 'Titanic' being towed by Allen Liner 'Virginian' to port"... excepting that these messages were not coming from the "Carpathia" as these phantom ships had wireless capabilities up to a maximum range of 240 km (150 miles).

The English White Star Line, owners of "Titanic", continued to claim that everyone was safe and the ship had not sunk. However the log recorded by the "Olympic" didn't confirm their claims. This controversy should have be ignored if a 21-year old operator named David Sarnoff, that we will see again later about Internet (in 1964 Sarnoff forecasted the use of the microcomputers, databases, high speed communication lines, networks and the concept of global, hadn't detected the weak signals of the "Olympic" from the USA, and broke the silence. Faced with the truth, and hounded by thousands of reporters and outraged relatives of passengers, the White Star Liner officials had finally to break down the secret and revealed the horrible facts.

Eventually, by 9 PM on April 18, 1912, the "Carpathia" arrived at the Port of New York with the few survivors. In the next days Senator William Alden Smith, Republican of Michigan, urged the Senate to act quickly to authorize an inquiry into the Titanic sinking after he learned that President Taft intended to take no action.

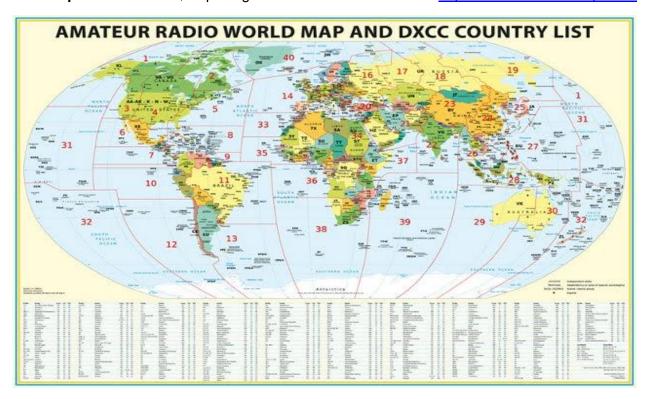
As Chairman of the committee investigating the shipwreck, Senator Smith summoned all involved people, including Marconi to appear. The hearings revealed no information about the origin of the false messages concerning the saving of the ship and passengers. However, it appeared strange that the "Californian" ship located 16 km (10 miles) away didn't answer the call and didn't see the seven rockets sent by the Titanic. Worst, there was no full time wireless operator on duty on this ship. Senator Smith sarcastically noted also that, in the interim, at the Stock exchange the Marconi Company jumped from \$55 to \$225 per share... At last it turned out that Marconi had an agreement with the New York Times for an exclusive story.

When Marconi got on the stand, Senator Smith insisted on these facts with vehemence. Obsessed in his belief that the unregulated wireless spectrum was partly to blame in the "Titanic" disaster, he painted Marconi as a man willing to subordinate the public good to his personal interests, mainly to get a complete wireless equipment and spectrum monopoly. Senator Smith used the "Titanic" hearings to condemn the laissez-faire status of the wireless, and appeal for the international regulation of radio. His action will lead to the Radio Act of 1912.

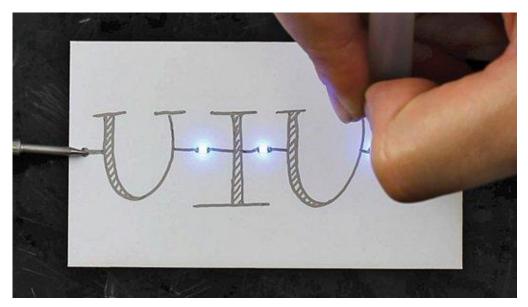
Some years later, Bruce Ismay, the Managing Director of the White Star line had to endure severe public criticism for surviving the disaster and sinking. By a strange fate, the two managers involved in this disaster died the same year. Bruce Ismay had to retire from public life and died in 1937. Guglielmo Marconi was not harassed but he died also in 1937, on July 20 in Bezzi-Scali, near Roma, Italy. He was 62 years old.

After the disaster, Harold Bride continued to serve as a Marconi operator. During the First World War, he served on the steamer Mona's Isle as a telegraphist. He broke off an engagement when he met a young school teacher named Lucy Downie. They married and had 3 children. Harold was so distressed by the loss of his good friend, Jack Phillips, and couldn't cope any longer with the notoriety that went along with his having been the sole surviving wireless operator from the disaster. To escape the attention he moved his family to Scotland and became a traveling salesman. He and Harold Cottam, the wireless operator from the Carpathia, whom he had met previously and was good friends with, stayed in touch for many years. He lived out the rest of his days in relative obscurity and died in April of 1956.

Wall Map 2012 edition. \$19 postage included. See details on http://www.hamradiomap.com/



### Something new



To connect batteries to devices such as resistors and LEDs, a newly developed ballpoint pen uses silver-based ink that conducts electricity through lines drawn over paper, wood, plastic and even some textiles. Jennifer Lewis, the materials scientist who led the pen's design at the University of Illinois, says she is now looking for business partners and hopes to have products that integrate the pen and ink on the market within a few months.

#### Useful idea to ID cables



## Use bread bag clips to label cords.

## Reduce / prevent relay contact arcing

Add a series combination of 100 ohms and a 0,1uF capacitor across the contacts.



Also available as a commercial product

#### **QRV Services offers the following expertise:**

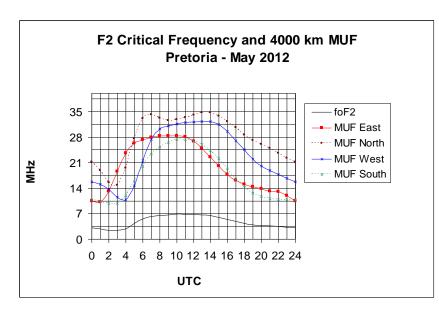
- General equipment and TV repairs
- Small-scale design and manufacturing
- Frequency and power calibration
- Technical writing
- 3<sup>rd</sup> Party scrutiny of projects and documents
- MFJ 259/69 Analyzer repairs and calibration
- Valuation of ham estates and their disposal

#### and products:

- Legal limit 40m dipole traps
- Linear power supply O.V. protection kits
- 30A DC switching supplies
- Nissei SWR/Power meters HF and VHF/UHF
- Connectors RF and DC
- Plug-in triple sequential industrial timer

Contact Hans at 012-333-2612 or 072-204-3991





## Long Term HF Propagation Prediction for May 2012

Courtesy ZS6BTY

(see also our website propagation tab)

#### **DX Operating**

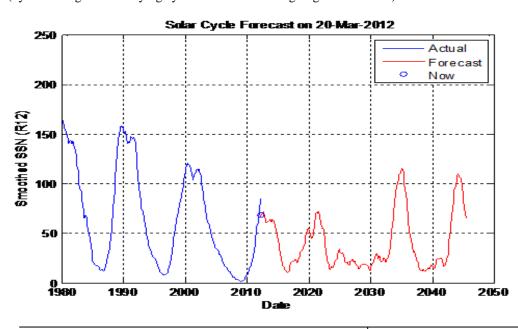
The graph shows the 4000 km maximum useable frequency (MUF) to the East, North, West and South from Pretoria for the first hop using the F2 layer.

#### **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.

### Very long-term forecast

(by extracting the underlying cycles in the SSN data going back to 1750)



"This is preliminary and I hope I am wrong. We are in cycle 24 now. Cycle 25 is equally weak and cycle 26 is missing"



# Minder konvensionele (maar meer beskrywende) Afrikaanse vertalings vir Engelse woorde:

backseat driver = skouervlieg blind date = moljol brandy = polisiekoffie cubby hole = vroeteldoos dagga = rondkyktwak face-lift = hysbakkies go-go girl = wikkeldoedie hairdresser = dollaklitser helmet = pletterpet rapper = rymkletser sales rep = kommissiekabouter stapler = draaddrukkertjie / papiervampier stew = vleismoles tantrum = baba-dans / vloermoer toi-toi = vakbond-vastrap / williewerkie-wals toothbrush = bekskrop