



# WATTS

03-2015  
Year 85 + 3m

Monthly Newsletter of the Pretoria Amateur Radio Club  
Maandelikse Nuusbrieff van die Pretoria Amateur Radio Klub

◆ PARC, PO Box 73696, Lynnwood Ridge 0040, RSA  
 e <http://www.parc.org.za> @ [zs6pta@zs6pta.org.za](mailto:zs6pta@zs6pta.org.za)



**Bulletins : 145.725 MHz on Sundays / Sondag at 08:45**

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

Activated frequencies are announced prior to bulletins

**Swopshop : 2m and 7.066 MHz live on-air after bulletins**

Bulletin repeats on Mondays / herhalings op Maandae : 2m 19:45



**Rallyesport Rally : 14 Feb 2015 : Pieter ZS6CN and sw Annatjie**

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## Next Events

### Club Social Meeting :

Thursday 5 March at 7:00PM at SAM's

### Club Committee Meeting :

Thursday 19 March at 7:00PM at SAM's

**RAE Classes** : Presented by Vincent Harrison ZS6BTY and Etienne Naude ZS6EFN on Tuesday evenings from 19h00 – 21h00 at the Waterlab Training Room, 41 de Havilland Crescent, Perseuor Park

## PARC Committee Members / Komiteelede : 2014 – 2015

<b>Chairman, Social &amp; Rallies</b>	Johan de Bruyn	ZS6JHB	<a href="mailto:zs6jhb@gmail.com">zs6jhb@gmail.com</a>	012-803-7385	079-333-4107
<b>Vice Chairman</b>	Jan Pienaar	ZS6OB	<a href="mailto:pienaarja@gmail.com">pienaarja@gmail.com</a>		082-447-7823
<b>SARL liason</b>	Fritz Sutherland	ZS6SF	<a href="mailto:fritzs@icon.co.za">fritzs@icon.co.za</a>	012-811-3875	083-304-0028
<b>Treasurer</b>	Andre van Tonder	ZS6BRC	<a href="mailto:andre.vtonder@absamail.co.za">andre.vtonder@absamail.co.za</a>	361-3292	082-467-0287
<b>Web co-ordination</b>	Graham Reid	ZR6GJR	<a href="mailto:greid@wol.co.za">greid@wol.co.za</a>		083-701-0511
<b>RAE, Bulletin co-ordinator</b>	Vincent Harrison	ZS6BTY	<a href="mailto:zs6bty@telkomsa.net">zs6bty@telkomsa.net</a>	012-998-8165	083-754-0115
<b>Contests</b>	Pierre Holtzhausen	ZS6PJH	<a href="mailto:zs6pjh@telkomsa.net">zs6pjh@telkomsa.net</a>	012-655-0726	082-575-5799
<b>Repeaters</b>	Craig Symington	ZS6RH	<a href="mailto:zs6rh@hotmail.co.za">zs6rh@hotmail.co.za</a>		081-334-6817
<b>Fleamarket</b>	Alméro Dupisani	ZS6LDP	<a href="mailto:almero.dupisani@up.ac.za">almero.dupisani@up.ac.za</a>		083-938-8955
<b>Clubhouse</b>	Pieter Fourie	ZS6CN	<a href="mailto:pieterzs6cn@gmail.com">pieterzs6cn@gmail.com</a>	012-804-7417	083-573-7048
<b>Photographer, Technical</b>	Theo Bresler	ZS6TVB	<a href="http://theo@bresler.co.za">theo@bresler.co.za</a>		082-698-1742
<b>Auditor</b>	Tony Crowder	ZS6CRO	<a href="mailto:tcrowder@telkomsa.net">tcrowder@telkomsa.net</a>	011-672-3311	
<b>Historian, Archives, Awards</b>	Tjerk Lammers	ZS6P	<a href="mailto:zs6p@iafrica.com">zs6p@iafrica.com</a>	012-809-0006	
<b>Secretary, WATTS newsletter</b>	Louis de Wet	ZS6SK	<a href="mailto:louis.zs6sk@gmail.com">louis.zs6sk@gmail.com</a>	012-349-1044	072-140-9893
<b>Contests</b>	Jaco Cronje	ZR6CMG	<a href="mailto:jaco.cronje@moboxgroup.com">jaco.cronje@moboxgroup.com</a>		076-319-1057

### Birthdays – March / Verjaarsdae – March

01 Francois, seun van Karin en Sarel ZS6EK	02 Jozua, seun van Erna en Whitey ZS6JJJ
22 Julian Boutell ZS6AOU	22 Ivan Jancuska ZS6CCW
25 Doréén de Bruyn ZR6DDB	27 Sarel Stapelberg ZS6EK
28 Liezel en Le Clue, dogter en seun van Elma en Gawie Basson ZS6GJJ	



#### Spouse's Birthdays - March

19 Ria, Spouse of Henk Stuivenberg ZS6CS  
 25 Doreen, Spouse of Johan de Bruyn ZS6JHB  
 31 Annatjie, Spouse of Pieter Fourie ZS6CN

#### Anniversaries / Herdenkings - March

26 Louis ZS6SK en Sharmaine de Wet  
 27 Etienne ZS6EFN en Fiona Naude

### Lief en Leed / Joys and Sorrows

Bertha, the Wife of Hans Kappetijn is currently receiving treatment in hospital  
 Fritz Sutherland ZS6SF is recovering well from a back operation  
 Jan (Pine) Pienaar ZS6OB is showing good recovery after medical treatment  
 Lyn, the sw of Andre van Tonder ZS6BRC is recovering from hospital treatment  
 Jaco Cronje ZR6CMG got married on the 14<sup>th</sup> of February. We wish him and his sw all the best.  
 The daughter of Etienne Naude ZS6EFN, got married on the 14<sup>th</sup> of February.

#### Contests and Diary of Events – March 2015 / Kompetisies en Dagboek van Gebeure – Maart 2015

27 Feb – 1 Mar	CQ 160-meter Contest, SSB : 22h00 – 22h00
28 Feb – 1 Mar	UBA DX Contest : 13h00 – 13h00
01	SARL Hamnet 40m Simulated Emergency Contest : 12h00 – 14h00
01	Youth Net : 16h00 on 7070kHz
07 – 08	ARRL International DX Phone Contest, SSB : 00h00 – 24h00
08	10m Digital Contest : 11h00 – 17h00
14 - 15	RSGB Commonwealth – All Africa DX Contest (no times available) : see SARL website
21 - 22	SARL VHF/UHF/Microwave Contest (no times available) : see SARL website
21 - 22	Russian DX Contest : 12h00 – 12h00
28 - 29	CQ WW DX WPX Phone Contest, SSB : 00h00 – 24h00
<b>1 April</b>	<b>Amateur Radio License Fee's Due at ICASA</b>

**Next PARC Flea Market : Saturday 28 March from 8h00**

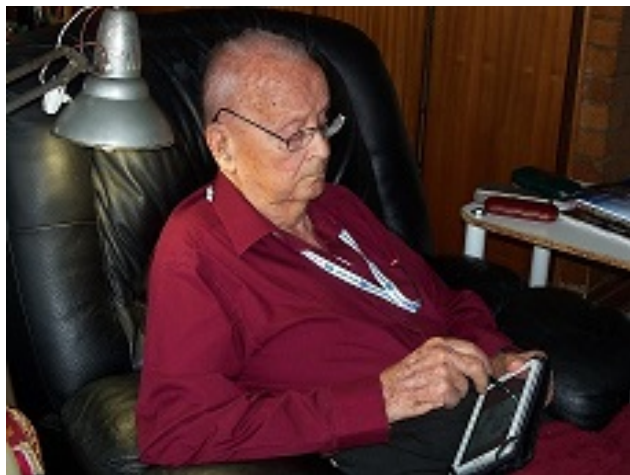
#### PARC SUBS / LEDEGELD FROM / VAN 30-06-2014

Bank	First National Bank	Ordinary Members / Gewone Lede : R150 Spouses / Pensioners : R50	<b>Your call sign must appear as statement text!</b>
Branch Code	25 20 45		
Account No	546 000 426 73		
Please remit your subs in time to our Treasurer, or pay per transfer into the PARC account Betaal asb. u ledegelde betyds aan ons Tesourier, of betaal per oorplasing in die PARC rekening			

## Silent Key : Luther Uys ZS6E

It is with great sadness that we learned that Luther Uys ZS6E, passed away on the 13<sup>th</sup> of February 2015 at the Dana Nursing Home in Wakkerstroom. Born on the 10<sup>th</sup> of November 1916, Luther joined the South African Radio League on 1 July 1947, and was on of the longest serving members of the League. Luther was also a Honorary Member of the Pretoria Amateur Radio Club.

Our sincere condolences are hereby extended to his daughter Jennifer, other family and friends.



In an email from his daughter Jennifer, she wrote the following : *"Thank you for your kind words. I am attaching a photo taken in of him and my son in Pa's study in Wakkerstroom in 2009 (the date on the photo is incorrect)- I believe his rig is in the background. THE latest photo is of him, already in the frail care unit of the Old Age Home, playing on my tablet at the age of 96. An electronic freak to the end!"*

## Updating your membership details on the PARC Website

Member details			
Callsign	<input type="text"/>	Last name	<input type="text"/>
Title	<input type="text"/>	Initials	<input type="text"/>
First names	<input type="text"/>	Nickname	<input type="text"/>
Birth date	<input type="text" value="0000-00-00"/> (yyyy-mm-dd)	Member type	<input type="text" value="Ordinary"/>
Language	<input type="text" value="English"/>	ID Number	<input type="text"/>
Spouse's name	<input type="text"/>	Spouse's callsign	<input type="text"/>
Spouse's birth date	<input type="text"/> (yyyy-mm-dd)		
Anniversary date	<input type="text"/> (yyyy-mm-dd)		
Postal address	<input type="text"/>		
Street address	<input type="text"/>		
e-Mail address	<input type="text"/>	Packet address	<input type="text"/>
Tel (Home)	<input type="text"/>	Tel (Work)	<input type="text"/>
Tel (Mobile)	<input type="text"/>	Tel (Fax)	<input type="text"/>
Profession	<input type="text"/>		
Hobbies	<input type="text"/>		
Comments	<input type="text"/>		
Date last payment	<input type="text" value="0000-00-00"/> (yyyy-mm-dd)		
Date next payment	<input type="text" value="0000-00-00"/> (yyyy-mm-dd)		
Fee	<input type="text" value="0"/>		

Occasionally, we do get complaints of birthdays of Members, Spouses or Anniversaries not being broadcast on the Bulletin, or being published in Watts.

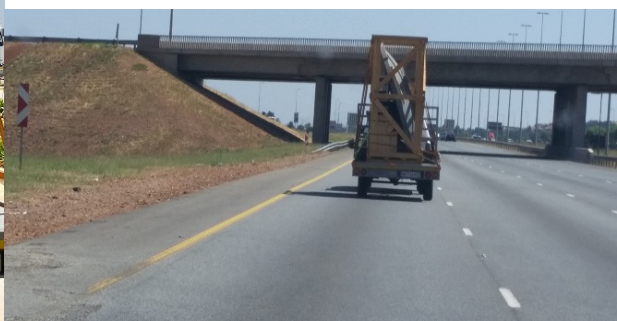
With the compilation of the birthday and anniversary lists, we primarily work from information obtained from the PARC Membership database.

To ensure that your information get broadcast and published, please follow the next steps:

- 1) Go to the PARC website and consult the database. Ensure that all your, and your spouse's details, as well as wedding anniversary is up to date in the correct format.
- 2) Verify your membership status, whether it is active or non-active. If all your Club dues are paid up to date, your status should be active.
- 3) Check if your club dues are paid up to date. If your dues are up to date, please contact the Club Treasurer (Andre van Tonder) or Secretary (Louis de Wet) to resolve any issues.
- 4) If your dues are not up to date, please ensure that it is, and that your status is re-instated.



Recently, Pierre ZS6JPH obtained a parabolic antenna, which he had to transport back to his QTH. With a diameter of 2.5m, weighing in at 290kg (450kg with the packing crate), Pierre was helped by Pieter Human ZS6PA to transfer the antenna along the N1 at a speed of 80 km/h back home. Fortunately the transfer occurred without any incident, and provided some good photographs.



*Do you think he is going to clear that bridge..?*



*Slowly slowly ..*



*Now where is my car going to fit in..?*



*Thinking outside the box..*

**IMPORTANT NOTICE : RENEWAL OF AMATEUR RADIO LICENSES AND FORM B**

Form B is **no longer** required. Amateur radio licenses are due on 1 April 2015. ICASA will be sending out reminders from January but the responsibility remains with the licensee to ensure that the license is paid. Unpaid licenses will expire at the end of April. Radio amateurs also have the option to pay for 5 years. Simply send an email to [dkuhr@icasa.org.za](mailto:dkuhr@icasa.org.za) and advise him that you are converting to a 5 year license then when making payment, pay R500. This is a saving of R100, and protects the licensee against inflation increases which will be introduced from the 2016 license year. When paying ICASA please ensure that you quote your license number and callsign.

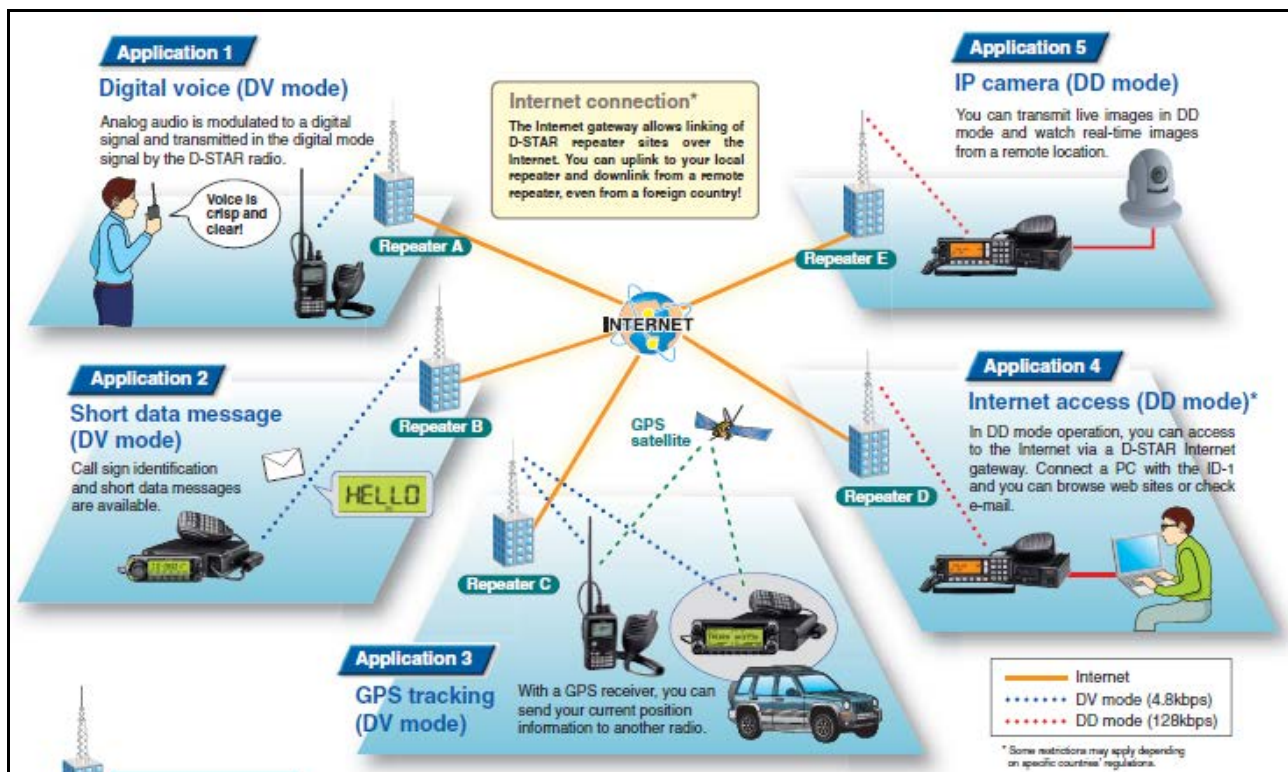
## D-STAR : Digital Smart Technology for Amateur Radio

D-STAR (Digital Smart Technologies for Amateur Radio), developed in the late 1990's by JARL (Japanese Amateur Radio League) was the first packet-based standard designed for, and specifically used by amateur radio. Utilizing digital voice modulation, less bandwidth is used than the analog voice modes AM, FM and SSB. As long as the receiving signal is above a certain threshold, reception is of a better quality than an analog signal at the same signal strength.

D-STAR compatible radios are available for the VHF, UHF and microwave amateur bands, while they are also able to connect to the Internet and other networks, thereby enabling them to transmit and receive streams of voice or packet data. Subsequently, communication from city to city or even to another countries is possible using a 5W handheld radio. A D-Star radio is also able to send short text messages, and show the callsign of anybody who is currently transmitting.

The D-STAR system is capable of linking local repeaters, and through the Internet, utilizing callsigns for the routing of traffic. All servers are linked via TCP/IP, operating with proprietary "gateway" software developed by Icom. This creates a gateway "trust" environment where radio amateur operators can communicate with each other in a secure encrypted mode.

D-STAR is able to transfer both voice and data via digital encoding using the 2m (VHF), 70cm (UHF) and 23cm (1.2 GHz) amateur radio bands. Voice audio is encoded as a 3600 bit/s data stream by means of the D-STAR Digital Voice protocol standard (DV). In addition to Digital Voice mode (DV), Digital Data (DD) can also be sent at 128 kbit/s on the 23cm band only. (see figure)



The current software controlling D-STAR is rs-rp2c version 2.0, also more commonly known as "Gateway 2.0". In order to use repeaters/gateways attached to a particular trust server domain, each participating amateur station must "register" with a gateway as their "home" system, which also populates their information into the trust server, a specialized central gateway system, which allows for lookups across a particular trust server domain.

Only one "registration" per trust domain is required. Each amateur is set aside eight 10.x.x.x internal IP addresses for use with their callsign or radios. Various naming conventions are available to utilize these addresses if needed for specialized callsign routing. Most amateurs will only need a handful of these "registered" IP addresses, as the system maps these to callsigns, and the callsign can be mapped into multiple radios. Next month we continue with more on D-STAR.

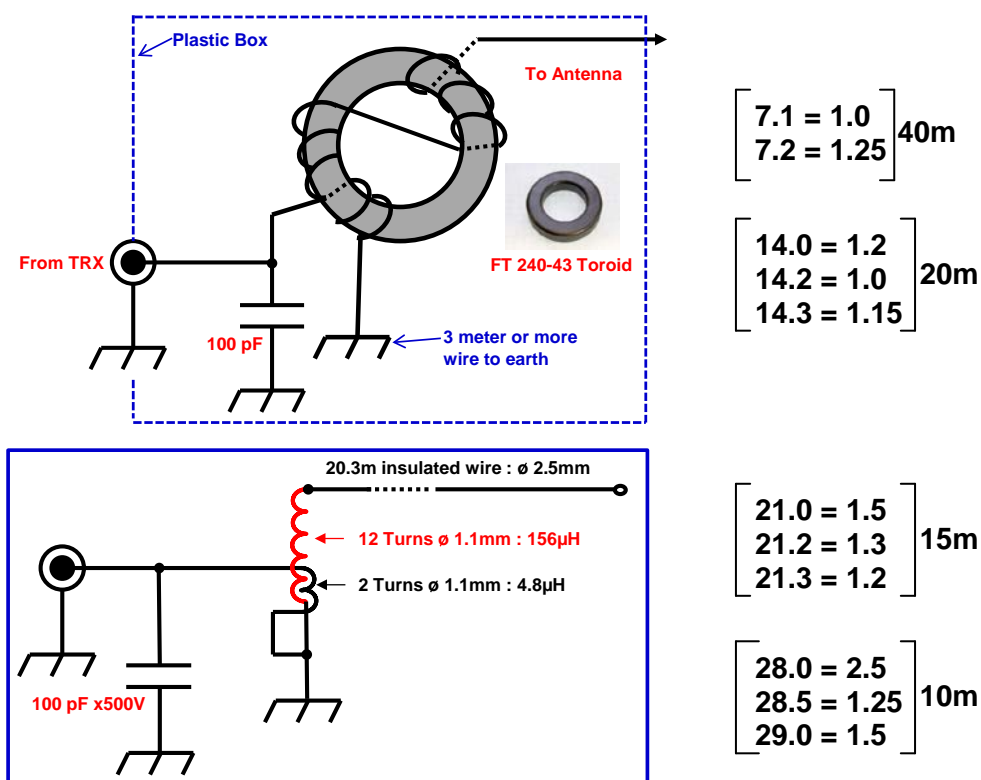
## Upcoming Rallies : March and April 2015



SCC East Rand Rally : 14<sup>th</sup> or 21<sup>st</sup> of March  
 SASOL Rally : 17<sup>th</sup> – 18<sup>th</sup> of April

Please Contact Johan de Bruyn ZS6JHB for more information: [zs6jhb@gmail.com](mailto:zs6jhb@gmail.com)

### Wire antenna for small property or field day (OESVJA ex ZS2VJ)



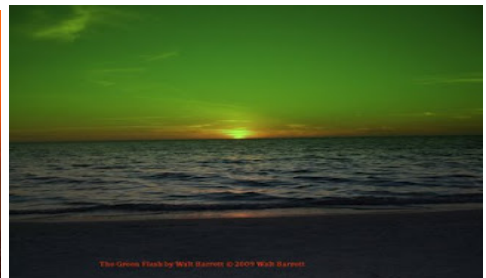
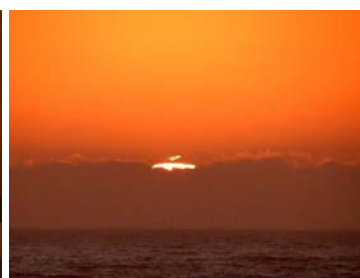
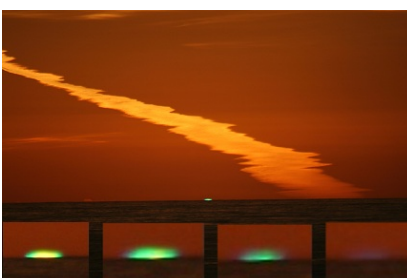
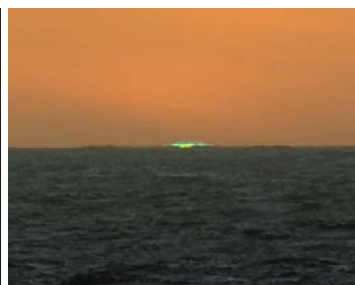
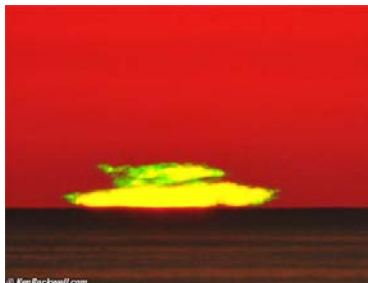
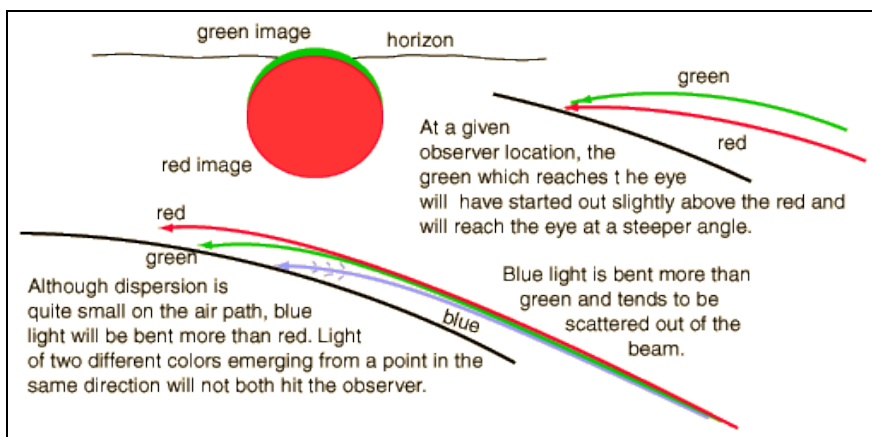
For any technical queries, please do contact Hans Kappetijn

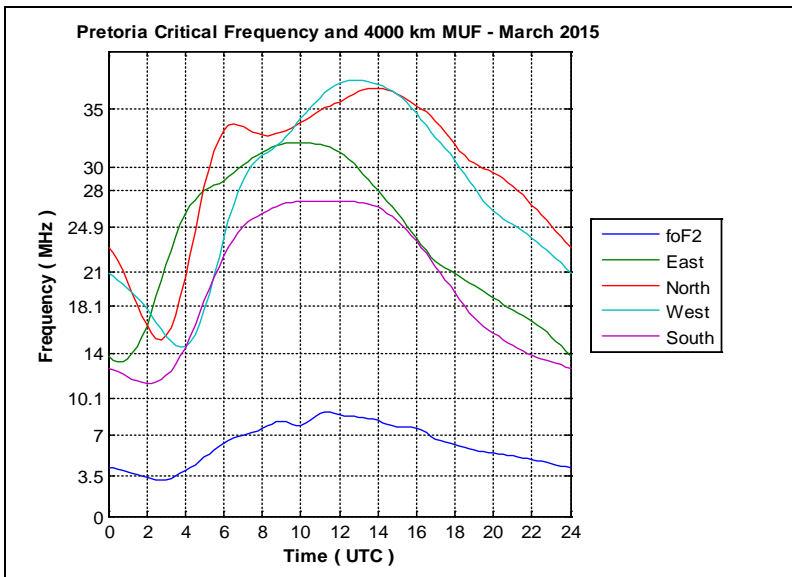
## Green Flashes

Occasionally, an optical phenomenon called a “green flash” can be observed the moment after sunset, or the moment before the sun rises. Under optimal conditions, a green spot will be visible above the upper rim of the disk of the sun. The duration of this phenomenon is not more than a second or two. Sometimes, the green flash can resemble a green ray shooting up from the sunset or sunrise point. However, this occurs very rarely.

Green flashes occasionally occur right after sunset or right before sunrise. When the conditions are optimal, a green spot is visible above the upper rim of the disk of the sun. The green appearance usually lasts for no more than a second or two. Rarely, the green flash can resemble a green ray shooting up from the sunset or sunrise point. Green flashes occur because the atmosphere can cause the light from the sun to disperse into different colors.

The index of refraction for red is 1.000292 and that for blue is 1.000295. Out of a total refraction of about  $0.53^\circ$ , the dispersion is only  $0.006^\circ$  or about 20 arc seconds, compared to a 120 arc sec resolution for the eye. Thus under normal conditions the eye would not see this.





## Long Term HF Propagation for March 2015

### 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 F-layer frequency for short range communications.

See also the Propagation tab at <http://www.parc.org.za/>

Courtesy Vincent ZS6BTY

C/O NELSPOORT & 801 MALMESBURY STR, WINGATE PARK, PRETORIA [S25.49.36 & E28.16.07]

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  - 30A DC Anderson Power Poles
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  - Plug-in triple sequential industrial timers
- Contact Hans at 012-333-2612 or 072-204-3991

### Past Members of PARC : Nico Michael ZS6BVR and Mike Rowland ZS6AFG



Nico Michael ZS6BVR (ERB & PARC), Louis de Wet ZR6AA (SK) (ERB), Ernie Jacobson ZS6ATQ (ERB), Mike Rowland ZS6AFG (SK) (ERB & PARC) and "Duppie" du Plessis ZS6BDD (ERB)

The above photographs were taken in 1980 when Nico and Mike, then members of the East Rand Branch (ERB) were installing the 2 meter repeater on top of a 100 meter high stack in Springs.

***From birth, man carries the weight of gravity on his shoulders. He is bolted to the earth. But man has only to sink beneath the surface and he is free.*** Jacques Yves Cousteau.  
 French undersea explorer and filmmaker: 1910 – 1997.