



WATTS

08-2016
Year 86 + 8m

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

✉ PARC, PO Box 73696, Lynnwood Ridge 0040, RSA
<http://www.parc.org.za> @ 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

Onlangse aksie by die Motomid Tydren in Middelburg op die 30^{ste} Julie. Meer op bladsy 10



In This Issue / In Hierdie Uitgawe

PARC Committee Members 2016.....	P 2
Birthdays and Anniversaries.....	P 2
Diary and General Information & News.....	P 2
PARC AGM / PARK AJV.....	P 3-7
Working DX should be fun.....	P 8
Achievements by PARC Members.....	P 9
Die Motomid Tydren.....	P 10-11
Installing the PARC Repeater.....	P 12
Juno Mission to Jupiter.....	P 13-15
The flavors of PSK31.....	P 16
Technical Items.....	P 17

Club Meetings / Klub Vergaderings

Club Social Meeting :
 Saturday 6th of August 2016 from
 14h00 at SAM

Committee Meeting :
 Saturday 6th of August 2016
 from 16h00 at SAM

PARC Fleamarket and Annual General Meeting : 27 August 2016

The next Pretoria Amateur Radio Club Fleamarket and Annual General Meeting will both take place on the 27th of August at the Pretoria Old Motor Club, Keuning Street, Silverton.

The Fleamarket will commence from 08h00. Please do contact Almero du Pisani ZS6LDP (083-938-8955) for more information or to book a table, or if you wish to donate any old equipment to PARC.

The AGM will commence from 11h30. It will be followed by a bring-and-braai. PARC will supply salads and cutlery for the event. Proxy and Nomination forms are available on page 3 of this Issue of Watts. Please do contact Johan de Bruyn ZS6JHB for more information at 079-333-4107.

PARC Committee Members / Komiteelede : 2015 - 2016

Elected Members

Chairman, Social & Rallies	Johan de Bruyn	ZS6JHB	zs6jhb@gmail.com	012-803-7385	079-333-4107
Vice Chairman, Contests	Pierre Holtzhausen	ZS6PJH	zs6pjh@telkomsa.net	012-655-0726	082-575-5799
Treasurer	Andre van Tonder	ZS6BRC	andre.vtonder@absamail.co.za	012-361-3292	082-467-0287
Web co-ordination	Graham Reid	ZS6GJR	greid@wol.co.za		083-701-0511
Competitions	Jaco Cronje	ZR6CMG	jacocronje@yahoo.com		081-474-2220
Clubhouse & Contests	Whitey Joubert	ZS6JJJ	zs6jjj@gmail.com		072-120-4516
WATTS, RAE & Clubhouse	Louis de Wet	ZS6SK	louis.zs6sk@gmail.com	012-349-1044	072-140-9893
Co-Opted Members					
Fleamarkets	Alméro Dupisani	ZS6LDP	almero.dupisani@up.ac.za		083-938-8955
Auditor	Tony Crowder	ZS6CRO	tcrowder@telkomsa.net	011-672-3311	
Historian, Archives, Awards	Tjerk Lammers	ZS6P	zs6p@iafrica.com	012-809-0006	083-976-4387

Birthdays – August / Verjaarsdae – Augustus

03 Paul Sterling ZS6BMF	08 Tobie Jansen van Rensburg ZS6ZX
05 Hans Gürtel ZS6HVG	25 Paul (Doppies) van der Hoven ZS6BAQ
07 JB de Beer ZR6YV	25 John Niilsen LA4QAA
07 Whitey Joubert ZS6JJJ	28 Jean de Villiers ZS6ARA
08 Marnix Claeys ZS6MCM	16 Marie, dogter van Poppie ZS6BCP en Hansie Meyer ZS6AIK
08 Raymond de Wet ZS6ALG	26 Sinead, daughter of Heather and Vincent Harrison ZS6BTY

Spouse's Birthdays – August / Augustus

09 Helga, sw of Hans-Peter Knoepfler ZS6AJS

Anniversaries / Herdenkings – August / Augustus

07 Peggy and Edmar Willers ZS6UT
15 Engela en Jan Volschenk ZR6JJV

Lief en Leed / Joys and Sorrows

Andre Coetzee, ZS6GCA is recovering at home following his accident and operation.
Hans Kappetijn ZS6KR sustained a painful rib crack or fracture. We wish Hans a speedy recovery.

August Birthstone: Peridot

Peridot is said to have healing properties, to protect against nightmares, and to bring the wearer power, influence and a wonderful year.



Contests and Diary of Events – August 2016 / Kompetisies en Dagboek van Gebeure – Augustus 2016 (UTC Times)

06 – 07	10-10 International Summer Contest, SSB : 00h01 – 23h59
07	SARL HF Phone Contest : 13h00 – 16h30
09	SARL YL Sprint to celebrate Women's Day : 09h00 – 10h00 (7 063 – 7 130 & 7 130 – 7 200 kHz)
13 – 14	WAE DX Contest, CW : 00h00 – 23h59
13 – 14	International Lighthouse and Lightship Weekend
14	SARL Youth Net
19 – 20	Heidelberg Rally : Contact Johan de Bruyn for more information : 079-333-4107
21	SARL HF Digital Contest : 13h00 – 16h30
27 - 28	YO DX HF Contest : 12h00 – 12h00
27	PARC Flea market : From 8h00 – 11h00
27	PARC Annual General Meeting : From 11h30
28	SARL HF CW Contest : 13h00 – 16h30

PARC SUBS / LEDEGELD FROM / VAN 30-06-2016

Bank	First National Bank	Ordinary Members / Gewone Lede : R150 Spouses / Pensioners : R50	Your call sign must appear as statement text!
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**

Please Note : If your Club fees are not paid up to date, birthday details cannot be displayed in Watts

PARC Annual General Meeting 2016 : PARK Jaarvergadering 2016

The Annual General Meeting of the Pretoria Amateur Radio Club for 2016 will be held on Saturday, the 27th of August 2016, from 11h30. Any Motions, Proxy's or Nominations can be forwarded by email to the Club Secretary, Louis de Wet, ZS6SK to louis.zs6sk@gmail.com, or handed in on the day of the AGM before 11h00 at the latest at the Secretary.



86th ANNUAL GENERAL MEETING 86^{ste} ALGEMENE JAARVERGADERING Pretoria Amateur Radio Club



**Pretoria Old Motor Club
Keuning Str. Silverton**

Venue

Saturday 27 August 2016

Time : 11h30

Agenda : To be published

Plek

Saterdag 27 Augustus 2016

Tyd : 11h30

Agenda : Sal gepubliseer word

NB

Nominations awaited. Latest acceptance by 11h00 on 27 August 2016
Nominasies word afgewag. Laatste indiening teen 11h00 op 27 Augustus 2016
Nominations can be emailed to Louis ZS6SK at louis.zs6sk@gmail.com

PROXY Form (cut out) || VOLMAG Vorm (knip uit)

Only paid-up members may submit proxies || Slegs opbetaalde lede mag volmagte indien

I/Ekbeing ZS/R/U..... give/geeZS/R/U.....

Proxy to vote on my behalf at the 2016 PARC AGM

Volmag om namens my te stem tydens die 2016 PARK AJV **Geteken/Signed**.....

NOMINATION Form (cut out) || NOMINASIE Vorm (knip uit)

Committee Nominations must be in writing and signed by both the Proposer and Nominee and be handed in on **27 August 2016 by 11h00 at latest**. Use the Nomination Form below. The Proposer and Nominee must both be paid-up members.

Komitee Nominasies moet skriftelik wees en deur beide die Voorsteller en Voorgestelde geteken word en moet **op laaste teen 27 Augustus 2016 teen 11h00** ingehandig word. Gebruik die Nominasievorm hieronder. Beide Voorsteller en Voorgestelde moet opbetaalde lede wees.

Proposer: ZS Signature:
 Voorsteller: ZR Handtekening:
 ZU

NOMINEE GENOMINEERDE	CALLSIGN ROEPSEIN	NOMINATION ACCEPTED NOMINASIE AANVAAR
1		
2		
3		
4		

PARC AGM 2016 AGENDA : PARK AJV 2016 AGENDA

Agenda for the Annual General Meeting of PARC
At 11h00 on Saturday the 27th of August 2016 at the Pioneer Museum Silverton
Agenda vir die Algemene Jaarvergadering van PARK
Om 11h00 op Saterdag die 27^{ste} Augustus 2016 by die Pionier Museum Silverton

- 1 Welcome and Attendance / Verwelkoming en Teenwoordigheid
- 2 Apologies and Proxies / Verskonings en Volmagte
- 3 Declaration of Quorum / Verklaring van Kworum
- 4 Opening: Fritz Sutherland ZS6SF
- 5 Minutes of Previous AGM / Notules van Vorige AJV: Louis de Wet ZS6SK
- 6 Treasurer's Report / Penningmeester Verslag: Andre van Tonder ZS6BRC
- 7 Appointment of Auditor / Aanstelling van Ouditeur
- 8 Chairman's Report / Voorsitter Verslag: Johan de Bruyn ZS6JHB
- 9 Discussion of Motions / Bespreking van Mosies
- 10 Election of Committee 2017 / Verkiesing van Komitee 2017
- 11 General Matters / Algemene Sake
- 12 Presentation of Awards / Toekenning van Pryse
- 13 Guest Speaker (To be announced) / Gasspreker (Sal aangekondig word)
- 14 Closing / Afsluiting
- 15 Lunch / Middagete

PARC AGM 2016 : Minutes of Previous Meetings (2014-15) PARK AJV 2016 : Notules van Vorige Vergaderings (2014-15)

[Notule van die 84ste Algemene Jaarvergadering wat om 11:45 op 26 Julie 2014 te Pretoria Motorklub, gehou is.](#)

1. VERWELKOMING.

Die Voorsitter heet almal teenwoordig welkom. Die Voorsitter bedank ook almal wat hulle tyd afgestaan het om die Vergadering by te woon. Die Voorsitter versoek ook almal teenwoordig om die besoekersregister te teken, wat ook sal dien as 'n presensielys. Die Voorsitter bedank ook al die Klublede vir hulle insette die afgelope jaar wat verseker het dat die Klub meer stroombelyn was as vorige jare. Die Voorsitter wys ook die Vergadering daarop dat die Klub se ledetal tans op 107 lede staan, en dat dit die grootste Klub in die Pretoria omgewing is.

2. VOORSITTERSVERSLAG.

Die Voorsittersverslag word aan die Klublede voorgelees en sonder enige wysigings deur die Vergadering aanvaar. Die Voorsitter wys ook die Vergadering daarop dat die Voorsittersverslag op die Klub se webwerf geplaas sal word. Die Vergadering neem met dank kennis.

3. BEKRAGTIGING VAN NOTULE.

Die Notule van die vorige Vergadering word vir goedkeuring deur Tjerk ZS6P voorgestel, en deur Jan ZS6OB gesekondeer.

4. GOEDKEURING VAN FINANSIËLEVERSLAG.

Na 'n breedvoerige bespreking deur André wat die finansiële verslag aanbetref, word die verslag eenparig deur die Vergadering goedgekeur.

Die Voorsitter bedank André vir sy afgelope jaar se harde werk. Hans ZS6KR wys die Vergadering daarop dat hy 'n bedrag van R10 000 aan die Klub sal oor betaal vir toerusting wat hy namens die boedel van Dave Larsen ZS6DN verkoop het. Dave se vrou het alle opbrengste wat Dave se toerusting aanbetref aan die Klub geskenk. Die Vergadering neem met dank kennis.

5. RESOLUSIES VIR VERANDERING VAN KONSTITUSIE.

Frits wys die Vergadering daarop dat hy 'n resoluë ingedien het wat die goedkeuring van nuwe lede meer stroombelyn gaan maak. Hy wys ook daarop dat die resoluë meer seggenskap aan die Lede van die Klub gee om 'n aansoek goed te keur of af te keur. Sou persone om lidmaatskap

aansoek doen, sal so 'n persoon se naam op die bulletin op 'n Sondagoggend bekend gemaak word. Die Klublede het drie dae tyd om teen so 'n aansoek te stem waarna die Sekretaris die aansoeker van die Klub se besluit in kennis sal stel. Frits wys ook die Vergadering daarop dat die SARL van hierdie metode gebruik maak en dat dit uiters suksesvol is om nuwe lidmaatskapaansoeke goed te keur. Die Vergadering keur die resoluksie goed.

6. KLUBVERGADERINGS.

Na 'n breedvoerige bespreking oor wanneer Klubvergaderings gehou moet word is die Vergadering dit eens dat die Klubvergaderings nog steeds op die eerste Donderdagaand van elke maand gehou moet word.

7. TOEKENNINGS

Die Voorsitter stel Tjerk ZS6P aan om al die toekennings uit te deel. Die aangehegte twee lysste is vir die Vergadering se kennisname hierby aangeheg.

8. VERANDERING VAN LOGO.

Die Voorsitter lê die logo wat deur die Komitee as wenner aangewys is aan die Vergadering voor. Die Vergadering is nie heeltemal tevrede met die logo nie, en verwys die logo terug na die Komitee toe vir verdere veranderinge.

9. NOMINASIES VIR VERKIESING.

Die Voorsitter stel Hans ZS6KR voor om die verkiesing van Komiteeëde te behartig. Daar was twee nominasies vir die pos as Voorsitter nl. Jean ZS6ARA en Johan ZS6JHB. Die Verkiesingsbeampte wys die Vergadering daarop dat daar 'n korum is en daar is dadelik tot stemming oorgegaan. Johan ZS6JHB is as Voorsitter vir die volgende termyn gekies.

Die volgende Komiteeëde word ook vir die volgende termyn verkies;

Jean ZS6ARA
Frits ZS6FS
Theo ZS6TVB
Pine ZS6OB

Die Vergadering wens die Komiteeëde geluk met hulle verkiesing en wens hulle ook sterkte toe vir die komende termyn.

10. SPREKER ANDRIES VISAGIE.

Die Voorsitter stel Andries voor om as spreker op te tree. Andries het oor die rol van die Radioamateur en die Voortrekkers gepraat. Dit was 'n uiters insiggewende praatjie gewees en het die hele gehoor geboei.

11. AFSLUITING.

Die Voorsitter bedank almal weereens wat die vergadering bygewoon het. Hy wens ook die nuwe Komitee sterkte toe, en wens almal 'n heerlike ete toe. Die Voorsitter verdaag die Vergadering.

[Minutes of the 85th Annual General Meeting of the Pretoria Amateur Radio Club held at 11h00 on the 31st of October 2015 at the Pretoria Motor Club, Silverton, Pretoria](#)

1 WELCOME AND ATTENDANCE

The Chairman of PARC, Johan de Bruyn ZS6JHB, welcomes everyone present, and requests all to sign the visitor's register. The following apologies and proxies are noted:

Apologies: Andre van Tonder ZS6BRC

Proxies: Avida Bresler ZS6AVB, Roy Alexander ZS6MI and Raymond de Wet ZS6ALG

The Chairman introduces Fritz Sutherland ZS6SF to open the AGM.

2 OPENING OF AGM

Fritz Sutherland, SARL President, welcomes everyone present, and congratulates PARC as the largest and oldest club, doing things the best way. Fritz encourages everyone to join the SARL, and to vote for good candidates for the next PARC Committee.

3 CHAIRMAN'S REPORT

Johan de Bruyn, ZS6JHB delivers his Chairman's Report:

Eerstens baie welkom aan almal hier teenwoordig en dankie dat julle tyd ingeruim het om ons 85^{ste} AJV by te woon.

To one and all, a hearty welcome to this our 85th AGM. Thank you for taking time to be here.

A special welcome to the President of the SARL, Fritz Sutherland ZS6FS and our guest speaker for today Etienne Naude ZS6EFN and we look forward to your presentation

To my fellow committee members who supported me during the year. Thank you very much for your support and guidance. It has been said before. This is not a one man show but a team effort. Thank you once again to everyone that served on the committee this past year.

Silent Keys: During the year we lost Luther Uys ZS6GE, Dereck Lambert ZS6KQ and Molly Peer ZR6MOL.

Membership: We currently have 76 paid – up members and 7 honorary members, which brings the total to 83. As you all know we are one of the biggest clubs in the country. To those members who so regularly renew their subscriptions and who is actively participate in club activities like attending the meetings, participation during contests, rallies, reporting in on weekly bulletins, contributions to Watts ,keeping repeaters and Echo link working, and arranging and assisting with flea-markets, thank you for your support.

Club Meetings: The attendance of monthly meetings is slowly increasing; please let us know what you would like from the monthly meeting.

Repeaters: Thanks to the dedication of Craig ZS6RH and assisted by Andre ZS6CGA, the repeater network is operating very well .Thank you very much. Johan Lehman, ZS6JPL, thank you for keeping our Echo link and IRLP working.

Watts: To Louis ZS6SK, editor of Watts. Thank you for putting the Watts together every month. In my opinion it is a job well done.

To all the members of PRC and other clubs who so eagerly offer their service to do communication at all of the events. To one and all thank you for a job well done. It is always nice to receive an email from the organizers to say thank you and that they are happy with our service provided

Clubhouse: Thank you Pieter ZS6CN and Annatjie for caring for the hungry who attend the monthly meetings. As you know we have moved from Tuks to SAM Clubhouse. This move was made because access to the premises and toilets became difficult. Moving forward the club need to look at what to do with the bar area .Maybe we can keep that area to utilize as a museum. We have been asked by UPE to vacate the kitchen and these needs to be done as soon as possible.

Finances: Andre, Thank you for all your efforts in keeping our finances in order. However the membership data base needs special attention. Need I say more?

Flea-Markets: Throughout the year the flea-markets were well attended. To Almero ZS6LDP, for organizing these events. Thank you to one and all of our regular and not so regular sellers from other clubs, you are all welcome at our flea-markets.

Contests: Pierre to you and Jaco, thank you very much for your contribution during the past year's contests in the past year. If you know of somebody else that is prepared to assist us, it will be greatly appreciated. Thank you also to the visitors who pitch up on these contest days. Your support to us is appreciated.

RAE Classes: If memory serves me right, this is the fourth year that PARC is helping with preparations for the RAE. I do notice a few of the recent attendees among us. Thank you very much to Vince Harrison ZS6BTY, Louis de Wet ZS6SK, Etienne Naude ZS6EFN for your dedication to this task.

A big apology if I did not mention your name in this list. And if you have any idea on how to improve on what we are currently doing, please do not keep quiet. Do make an effort to inform the committee. All suggestions will be listened too and feedback will be provided.

Thanks to each and every one who is here today and a very special thank you to the ladies, Joey Reid who took control of the catering; Annatjie, Irene and Doreen for the salads etc.

To Graham & Joey thank you for handling the trophies and certificates.

Chairman : Johan de Bruyn ZS6JHB

31 October 2015

4 FINANCIAL REPORT

Johan de Bruyn ZS6JHB discusses the financial statements of PARC and reports that the Club is in a sound financial condition. A motion to accept the financial statements as true is accepted by Members of the Meeting. A suggestion that Club Fees is increased by 10% is declined by Members of the Meeting.

5 DISCUSSION OF MOTIONS

The following motion, submitted by Tjerk Lammers ZS6P, and seconded by Hans Kappetijn ZS6KR, is presented to the Meeting:

Motion:

- 1 The Chairman must be elected by the Committee.
- 2 The Chairman should not serve more than two consecutive years, but can serve again after a period of at least one year has passed.
- 3 That the rules of the Constitution be adjusted accordingly.

Motivation:

- 1 The Committee must appoint the person who they deem suitable to take the lead, with whom they must work together, and whom they trust. The Committee Members are in a better position to make informed decisions than Club Members.
- 2 A long-serving Chairman may undermine progression in a Club.

The motion that the Chairman is elected by the Committee is accepted by the Members of the Meeting. Vincent Harrison ZS6BTY objects to the principle and asks for a vote. The voting results are 20 in favor of the motion and 5 against. The motion is passed.

6 ELECTION OF PARC COMMITTEE

The following PARC Members are elected as Committee Members:

Johan de Bruyn ZS6JHB, Etienne Naude ZS6EFN, Andre Coetzee ZS6GCA, Jean de Villiers ZS6ARA, Whitey Joubert ZS6JJJ, Kenny Martin ZS6KMM, Graham Reid ZS6GJR, Andre van Tonder ZS6BRC, Pierre Holtzhausen ZS6PJH, Craig Symington ZS6RH, Gawie Marais ZS6GJM, Jaco Cronje ZR6CMG, Louis de Wet ZS6SK. The first Committee will be held within 14 days of the AGM.

7 GUEST SPEAKER

Etienne Naude ZS6EFN presents a marketing- and strategic plan for the future PARC Committee.

The Meeting is closed by the Chairman, who thanks everyone for attending, and wishes the next Committee all the best. A meal is served to all who attended.

Working DX should be fun – shouldn't it? : Hans Kappetijn ZS6KR

Working DX is still one of the most fascinating aspects of our hobby. It isn't for everyone but part of the magic of amateur radio is that you can choose the activity that interests you.

Over the years the DX scene has changed greatly. While in the 1960's you might expect to regularly work operators living and working in some remote spot for whom amateur radio was a unique way of "talking home".

These days there is far more focused approach – more competitive, technically advanced and accessible – supported by both mobile phones and internet.

For many, DX-ing remains absorbing because it tests skills and encourages optimization of stations and antennas. But something has changed.

Too much noise, deliberate QRM, misuse of high power, chaotic behavior in pileups and DX police are major symptoms of the problem – not the cause. Rather a skills and attitude improvement of those in the hobby is called for. To achieve getting that QSO in the log requires that two stations can hear each other and this is where much of the problem lies.

First of all the DX station will split his listening frequency from his transmit frequency. The callers will then call around the "QSX" slot. That is how it should work but often it does not. The DX frequency is often ruined by callers who have not bothered to listen for long enough to find out what is going on. Meanwhile the QSX slot becomes a non-stop roar of callers some of which just continue even when the DX is transmitting. Presumably they cannot hear and have discovered the frequency from the internet.

Some of the most experienced DX operators such as Mark ON4WW and John ON4UN have written a book on operating ethics. Randy W6SJ wrote about *DX-etiquette* and Roger G3SXW and Gary ZL2IFB both published good advice. Wayne N7NG wrote some advice for the DX-er in *DX-expeditioning Basics*. Bob G3PJT and Randy W6SJ in conjunction with others published DX Code of Conduct for either self-education, or as a sharp reminder of some simple rules to follow so as to get more fun out of working DX.

Wayne N7NG wrote: *"Most DX-peditioners want to put on the best show possible. When the skills on both sides are up to the task, the operating is a joy to hear. When the skills are lacking maybe it's better to switch off the radio"*.

The rules

01. I will listen, and listen and then listen again before calling.

Also understand how your radio works on "split"

02. I will call only if I can hear the DX station properly.

03. I will not trust the Cluster and will be sure of the DX call sign.

Never ask his call sign when in contact.

04. I will not interfere with the DX nor anyone calling him. Many are guilty of this with chat or "policing"

05. I will wait for the DX to end a contact before calling.

Do not "tail end"

06. I will always send my full call sign.

Incomplete call signs cause delays with repeats.

07. I will call and then listen for a full interval.

Continuous calling is arrogant especially by computer raising QRM.

08. I will not TX when the DX calls another call sign.

09. I will not TX when the DX queries a call sign unlike mine.

Don't pretend you have been called.

10. I will not TX when the DX calls another geographic area.

His beam will be towards NA, AS or EU area. Not yours.

11. I will not repeat my call sign when the DX calls me unless in he copied incorrectly.

12. I will be thankful if I do make a contact.

13. I will respect my fellow hams and conduct myself so as to earn their respect.

Be competitive with politeness.

Now having read this far we can hear you saying "Yes I know all that, just good operating common sense. You need to tell everyone else". Well, let him who is blameless cast the first stone. We need to remember it is a hobby and the starting point is demonstrating and encouraging good practice by operators all over the world and indeed also by those at the sharp end of DX-ing. We need to help and encourage new entrants to the hobby. In amateur radio it has been normal to learn by example – as true now as ever. Good practice encourages good practice. Let's work together to raise standards worldwide.

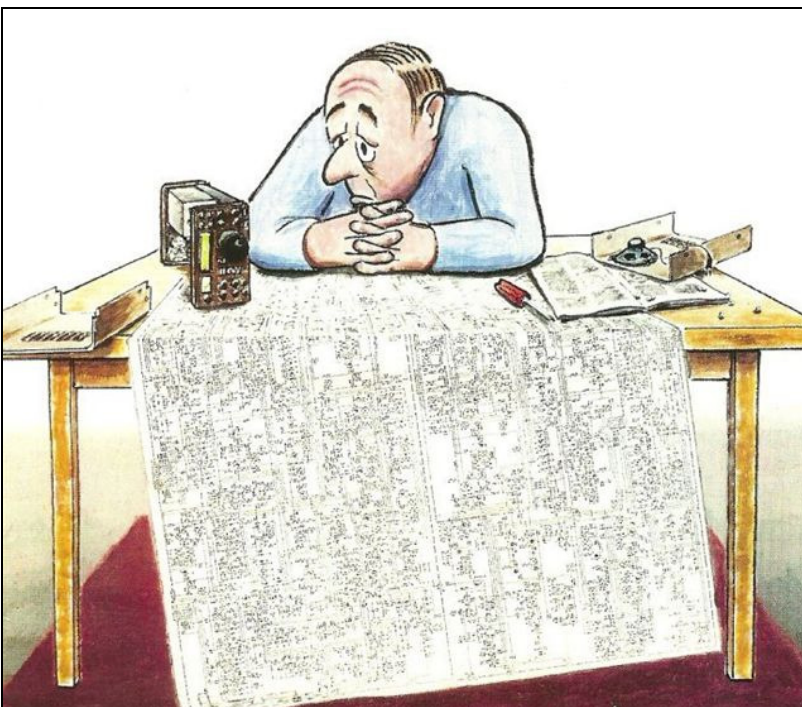
Achievements by PARC Members



IARU PRESIDENT'S AWARD FOR ZS6AKV - Hans van de Groenendaal ZS6AKV has been awarded the IARU Diamond Award for his support of the IARU. He served for the past 20 years as the IARU Satellite Adviser and initiated the frequency coordination process. The award was presented at the SARL meeting on Saturday by IARU Region 1 secretary, Dennis Green ZS4BS.

Pretoria Amateur Radio Club hereby congratulates both Hans and Etienne for their great achievements, and wishes them all the best with their efforts to make Ham Radio such a magnificent hobby.

SARL SECRETARY PORTFOLIO FOR ETIENNE ZS6EFN – Etienne Naude ZS6EFN has, during the SARL Council Meeting on the 30th of July, been co-opted as Secretary. In addition to serving on the PARC Committee the past year, taking care of coordination and presenting RAE classes, has also initiated, and is coordinating the Lexicon dictionary project. Etienne has also organized the recent function for PARC veteran radio hams, which was a great success.



Do you know what a SEENAGER is? A senior teenager!!!

It is someone who has everything that he wanted as a teenager.

He does not have to work, or go to school. He gets an allowance every month. He has his own place to stay. He does not have curfew hours.

He has his own car, the people he hangs around with are not scared of becoming pregnant, and they do not use drugs, and he does not have to treat acne. His responsibilities are minimal.

You have reached your throw away age...

Die Motomid Tydren : Middelburg : 30 Julie 2016

Die HMC ClassiQ Motomid Tydren, aangebied deur die Hoëveld Motorklub, is gehou op die 30^{ste} Julie 2016 in die omgewing van Middelburg, Mpumalanga. Die tydren, wat bestaan uit 14 trajekte, is moontlik gemaak deur die hoofborg Classiq Panelbeaters in Middelburg, asook verskeie ander besighede en individue in die Witbank/Middelburg omgewing. Die plaaslike grondeienaars V. Erichsen en Keerom Boerdery het goedgegunstig hul eiendom beskikbaar gestel vir hierdie tydren.



Menno Havelaar : "Waar is Kar 0?"



'n Interessante verskeidenheid motors het deelgeneem



Verskeie Datsun en Ford Escort motors het deelgeneem, terwyl 'n paar ander motors goed deurgeloopt het

Weereens het die Radio Amateurs van PARK en MRK hul goed van hul taak gekwyt en het kommunikasie glad verloop tydens die tydren.

Hiermee bedank PARK graag die volgende individue wat radio ondersteuning verleen het tydens hierdie tydren: Beheer Graham ZS6GJR en Joey Reid ; Mobiel 1 Dawid ZS6VS ; Marshal 1 Chris Barnard ZS6MBC ; Kar 0 Menno Havelaar ZS6 AGC.

Veldstasies: Auto Italia & Hencom Autobody: Ronel ZS6SBV & Johan ZS6JHB ; Triple X & Quickstart Autoleck: Louis ZS6SK & Willie ZR6WGR ; Middelburg Nissan 1 & 2: Pieter ZS6CN & Pieter ZS6PAM.



Terwyl Annatjie die wegspring behartig, is Pieter ZS6CN druk besig op die radio met sy spesiaal vervaardigde gasstofie byderhand, toegerus met windskerms wat keer dat die wind nie die koffievlam doodwaai nie



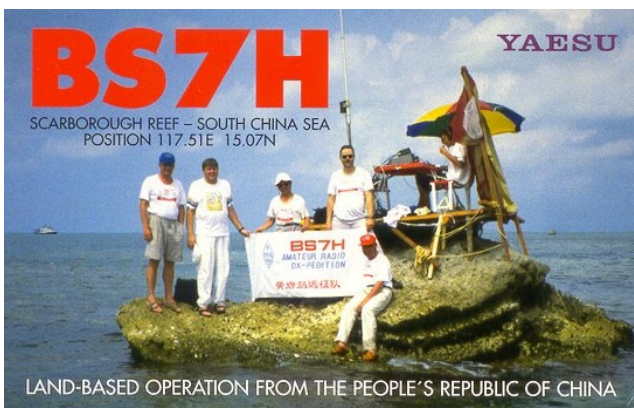
Al was die buffer en skerms voor skoonveld, het die Subaru van Coen van Zyl en Kosie vd Merwe vir niemand teruggestaan nie.

Die volgende tydren vind plaas in Heidelberg gedurende 19 – 20 Augustus. Kontak gerus Johan de Bruyn by 079-333-4107 vir meer inligting.

Installation of PARC Repeater



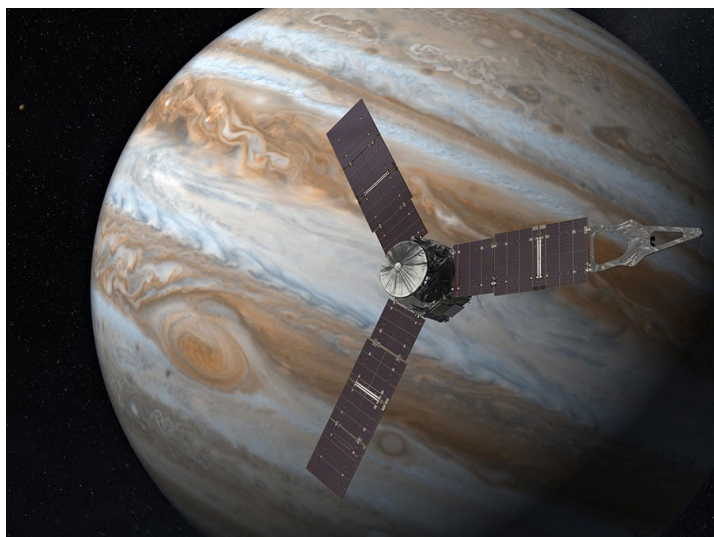
The recently purchased repeater for PARC was installed the past week at the Radcliff high site. PARC sincerely thanks everyone involved with the activities of purchasing and installing the repeater. Photo's by Andre van Tonder ZS6BRC.



Imagine DX-ing from your little island in the middle of the ocean. Located in the South China Sea, west of the Phillipines, The Scarborough Reef is undoubtedly the rarest and most controversial location on the DXCC list. Being very difficult to access, this location has ceated diplomatic disputes between it's two feuding masters, China and the Phillipines. Subsequently, the reef has only hosted 3 DX expeditions in the past, making it a prime location.

Juno Mission to Jupiter : Louis de Wet ZS6SK

Being the largest planet in our solar system, with a magnetic field nearly 20 000 times as powerful as that of Earth, Jupiter has always been regarded as the protector of Earth, capturing potentially life threatening large meteorites and space debris. Several missions have been sent to Jupiter in order to examine the features and structure of this planet, and have included Pioneer 10 & 11 (*1972-73), Voyager 1 & 2 (*1977), Galileo Orbiter (*1989), New Horizons (Jupiter and Pluto) (*2006) and Juno (*2011) (*Launch Date). In particular, the structure of the famous Great Red Spot and the chemical composition of the Jovian atmosphere has for centuries been the focus of many studies.



Artists impression of Juno spacecraft with Jupiter



Photograph of Jupiter showing Red Spot

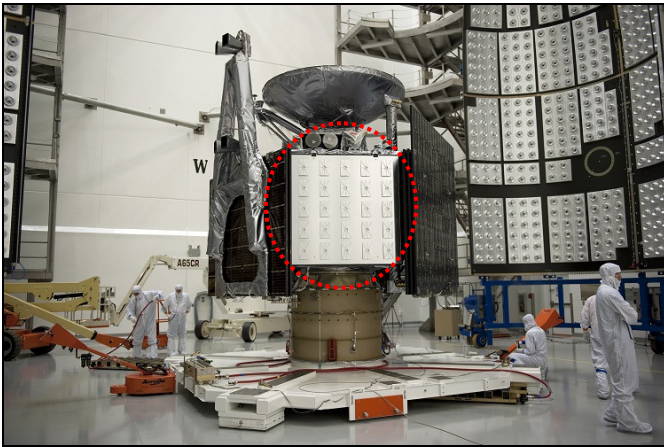
In 1995, the NASA Galileo mission to Jupiter dropped a probe into Jupiter's atmosphere. Data showed that Jupiter's atmospheric composition was different than scientists thought, and that our theories of planetary formation were wrong. Even though we have learned many things the past four decades, Jupiter still hides many mysteries beneath its swirling clouds. Some of the questions the Juno mission aims to address include:

- How did Jupiter form?
- How much water (and therefore oxygen) is in the Jovian atmosphere?
- How is Jupiter arranged on the inside? What is its deep structure?
- Does Jupiter rotate as a solid body, or is the deep interior moving at a different speed than the outside?
- Is there a dense core, and if so, how massive is it?
- How and where is its vast and powerful magnetic field generated?
- How are atmospheric features like the Great Red Spot related to the movement of the deep interior?
- What physical processes power the auroras – Jupiter's northern and southern lights?
- What do the poles look like up close?

The primary goal of the Juno mission is to reveal the mechanism of Jupiter's formation and evolution. It will observe the planet's gravity and magnetic fields, atmospheric dynamics and composition, and the complex coupling between the interior, atmosphere and magnetosphere that determines the planet's properties and drive its evolution. In addition to vastly improving our knowledge of Jupiter itself, as the archetype of gas giant planets, Jupiter will provide the knowledge to help us understand the origins of planetary systems around other stars.

The Juno spacecraft was launched on the 5th of August 2011 aboard an Atlas V551 rocket from Cape Canaveral, Florida. It was expected to reach, and enter orbit around Jupiter on the 4th of July, 2016.

The Juno spacecraft, which is both 3.5 m high and in diameter, weighed 3 625 kg at launch, consisting of 1 280 kg of spacecraft, 1 280 kg of fuel and 752 kg of oxidizer. The Juno spacecraft has three solar arrays, each having a surface area of 9 x 2.65 m. All solar panels contain a combined amount of 18 698 individual solar cells. The Juno craft contains various instruments, which will investigate the origin, interior, atmosphere and magnetosphere of Jupiter.



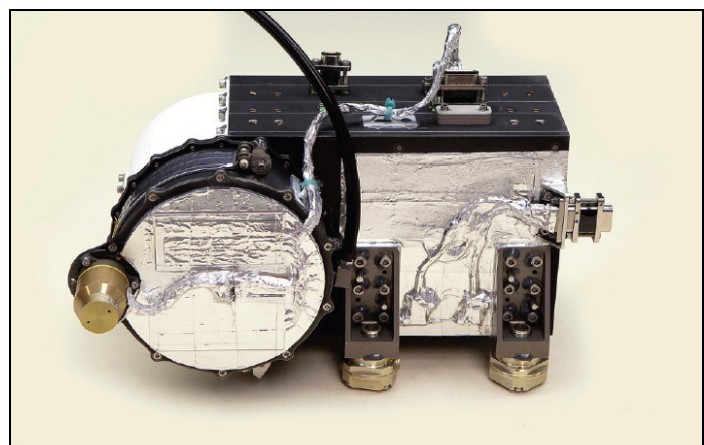
The **Microwave Radiometer (MWR)** will penetrate through Jupiter's cloud tops to provide data on atmospheric structure, movement and chemical composition to a depth as great as 1 000 atmospheres, or 550 km below the visible cloud tops. It will also determine the amount of water in the atmosphere. The MWR consists of six antennas designed to passively sense the microwaves coming from six levels within the clouds. All six antennas are located on the sides of Juno's hexagonal body, with the largest antenna on the one side.

The **Magnetometer Experiment (MAG)** will visualize Jupiter's magnetic field and create an extremely accurate 3-D map, by sensing the deep interior and watching for changes over time. This study will allow an understanding of Jupiter's internal structure and how the magnetic field is generated by the dynamo action inside, that of electrically charged particles deep below the surface. MAG will also monitor the field for long-term or secular variations during the entire mission. Measurement of these variations, as well as the 3-D map, will aid in determining the depth of the dynamo region.



The **Jovian Auroral Distributions Experiment (JADE)** is a set of sensors which will detect the electrons and ions that produce Jupiter's auroras. Jade consists of four sensors that share an electronics box. Three of the sensors will detect electrons in the space surrounding Juno, while the fourth will identify positively charged hydrogen, helium, oxygen and sulfur ions. Most of these ions are ejected from the volcanoes on Jupiter's moon Io. When Juno flies directly over Jupiter's auroras, JADE will be able to observe the light show, as these auroras can stretch for tens of thousands of kilometers over the Jovian pole.

Jupiter Energetic-Particle Detector Instrument (JEDI) is designed to measure the energetic particles that stream through space and study how they interact with Jupiter's magnetic field. These particles, consisting of electrons and ions follow the influence of Jupiter's magnetic field, and are channeled towards the planet's poles, where they crash into the atmosphere and create brilliant auroras.



Ref: **Jupiter Orbit Insertion Press Kit**. Jet Propulsion Laboratory. California Institute of Technology



Nose cone of the Atlas rocket containing the Juno spacecraft



Some magnificent Hubble Space Telescope photographs of the Jovian Auroras

© Hubble/ESA/NASA

The Flavors of PSK : Steve Ford WB8IMY

This article is condensed form the original published in QST-Magazine (August 2016). Developed by Peter Martinez G3PLX and introduced to the amateur radio community in 1998, Binary Phase Shift Keying at a signalling rate of 31 baud (PSK31) has been with us for many years now. Even though Quadrature Phase Shift Keying (QPSK31) debuted at the same time, and although it offered Forward Error Correction, it never gained traction in the HF community. PSK31 remained the king and hasn't relinquished it's title since.

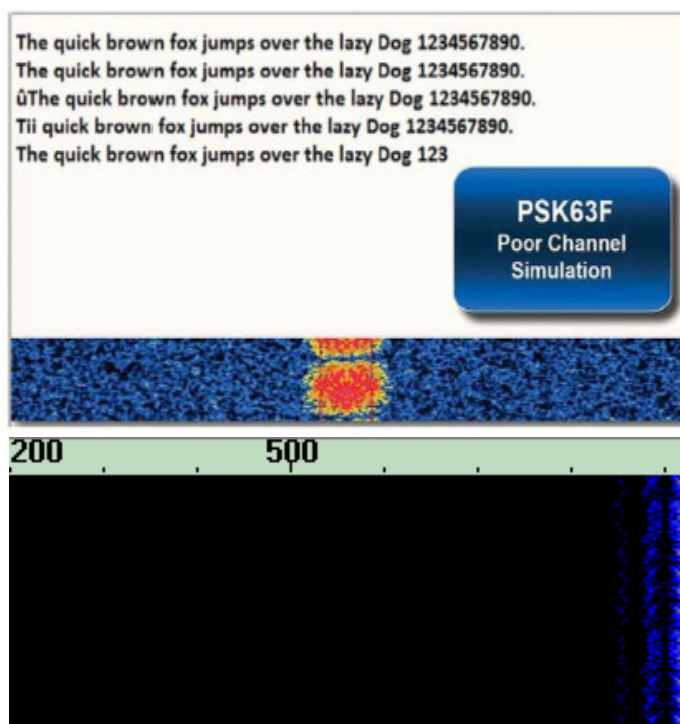
Mode	Symbol Rate
BPSK31	31.25 baud
BPSK63	62.5 baud
BPSK125	125 baud
BPSK250	250 baud
BPSK500	500 baud
QPSK31	31.25 baud
QPSK63	62.5 baud
QPSK125	125 baud
QPSK250	250 baud
QPSK500	500 baud
PSK63F	62.5 baud
PSK125R	125 baud
PSK250R	250 baud
PSK500R	500 baud

However, during the past 16 years Phase Shift Keying modes have undergone an interesting evolution since their debut. There are faster versions, such as PSK63, which is starting to enjoy an upstick in popularity. However, as speed increases, so does bandwidth, as shown in the Table left. When the throttle is pushed is pushed up to 500 baud, as with BPSK500, the effective bandwidth increases substantially.

Another issue with PSK is that it doesn't always work well when the going gets tough. It doesn't stand up well to interference, and polar flutter can render it useless. One could switch to highly robust HF digital modes such as Olivia, but not only does the bandwidth tend to increase, the intense software processing can slow a conversation down to a crawl.

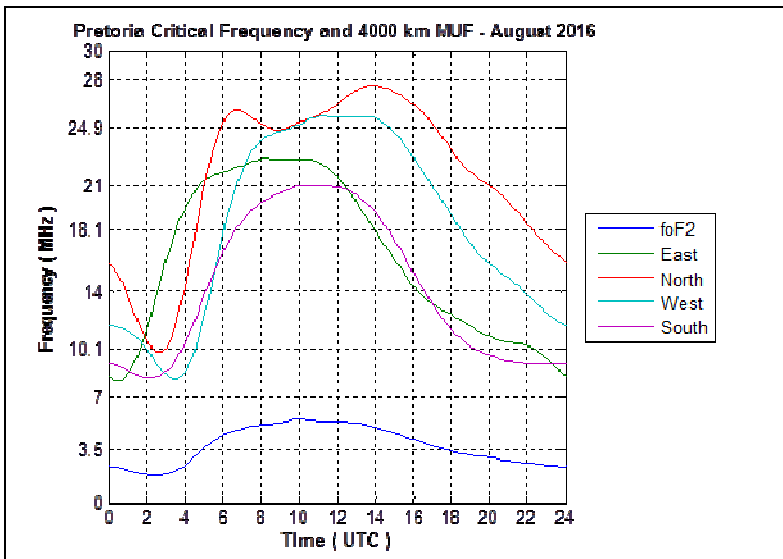
For keyboard-to-keyboard chats under difficult conditions, Steve Ford WB8IMY has been taking a closer look at a variant of robust PSK known as PSK63F. The "F" in PSKF63 stands for "Forward Error Correction". It is almost identical to the other robust PSK modes except that it does not include an interleaver.

PSK63F offers the speed of "normal" PSK63, but adds a remarkable ability to be decoded under poor conditions. It seems quite resistant to static crashes, which is good during summer months. Tony Bombardiere, K2MO, has discovered advantages to PSK63F and has been trying it out on 40 and 80 meters. In order to demonstrate the advantages of PSK63F, Tony has put together that shows how the mode performs under simulated HF channel conditions. Error rates have been as much as 50% lower with PSK63F as compared with BPSK and QPSK. The video can be watched online at www.youtube.com/watch?v=SyXQQc-4vNU.



Steve Ford is not advocating a mass switch-over to PSK63F, but indicates that it is worth a try if you are in an experimental mood. The author has only encountered two other multimode software applications that include PSK63F: *Fldigi* at www.w1hki.com and *MultiPSK* at http://f6cte.free.fr/index_anglais.htm.

Both applications are available free of charge, and both support RSID to help others identify the mode which is being used. Activate RSID and try some PSK63F CQ, and see who answers..



Long Term HF Propagation for August 2016

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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Here are some logical reasons why dogs are man's best friend:

1. The later you come home the more excited your dog is to see you.
2. Dogs don't mind if you accidentally call them by the wrong name.
3. Dogs like it if you leave lots of things on the floor.
4. Dogs parents never come and visit.
5. You never have to wait for a dog; they are always ready to go, instantly, 24 hours a day.
6. Dogs love you more than ever when you are inebriated.
7. When a dog smells another dog on you he does not mind, and licks you anyway.
8. If a dog runs away and leaves you at least he does not take half your belongings.

