



WATTS

2020-12

Year 90 + 12m

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 : Sundays from 08h45 / Sondag vanaf 08h45

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

and Echolink. Activated frequencies are announced prior to bulletins

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

Bulletin repeats on Mondays / herhalings op Maandae : 2m 19h45



The 2020 Veteran's breakfast was held on the 10th of October 2020 at Jan se Skuld in Pretoria North. On our front page, Members older than 70 who attended the function: Hansie Meyer ZS6AIK, Joe Katzman ZS6TB, Roy Alexander ZS6MI, Whitey Joubert ZS6JJJ, Richard Peer ZS6UK and Gawie Basson ZS6GJJ More on pages 7-8.

In This Issue / In Hierdie Uitgawe

Birthdays/Verjaarsdae ; Joys & Sorrows/Lief en Leed	p 2-4
PARC Bulletin Roster ; Club Fees	p 5
Dagboek van Gebeure / PARC Contest Participation.....	p 6
PARC Veteran's Breakfast / PARK Veterane Ontbyt	p 7-8
PARK Vlooiemark / PARC Flea Market	p 9
PARC AGM 2020 / PARK AJV 2020	p 10-14
HF Revival in the military	p 15
Advertisements and HF Propagation.....	p 16

Club Meetings / Klub Vergaderings

Club Committee Meeting :

The date of the next Meeting for the 2020/21 PARC Committee will be on Monday the 14th of January 2021

Birthdays and Anniversaries / Verjaarsdae en Huweliks Herdenkings

Member's Birthdays December 2020 / Lede Verjaarsdae Desember 2020

01 Pieter Fourie ZS6CN	20 Jurie Ferreira ZS6JFE
02 Antoinette Liebenberg ZS6D	27 Pierre Britz ZR6ADZ
07 Hansie Meyer ZS6AIK	28 Allan De Souza ZS6AVC
07 Tim Meyer ZS6TIM	30 Hans van de Groenendaal ZS6AKV (80)
08 Hans Kappetijn ZS6KR (Hon. Mem.)	31 Henk Stuivenberg PAOSTU
15 Alméro Du Pisani ZS6LDP	

Spouse's December 2020 / Gades Desember 2020

02 Antoinette ZS6D, gade van Danny Liebenberg ZS6AW
06 Sylvia, gade van Tjerk Lammers ZS6P (Erelid)
12 Elsa, gade van Fritz Sutherland ZS6SF†
23 Dienkie, gade van Pierre Britz ZR6ADZ

Anniversaries Dec 2020 / Herdenkings Des 2020

04 Ria en Henk Stuivenberg PAOSTU
08 Avida en Theo Bresler ZS6TVB

Member's Birthdays January 2021 / Lede Verjaarsdae Januarie 2021

05 Pierre Holtzhausen ZS6PJH	12 Gustav Snyman ZS6BWN (91)
07 Bertus Viljoen ZS6VIL	18 DP du Toit ZR6DP
10 Wynand Wessels ZR6WW	21 Albert Screuder ZS6SE

Spouse's January 2021 / Gades Januarie 2021

15 Moira, gade van Fanus Ferreira ZS6BUH
18 Zelda, gade van Wynand Wessels ZR6WW
25 Magriet, gade van Tobie Jansen van Rensburg ZS6ZX

Anniversaries January 2021 / Herdenkings Januarie 2021

05 Louise en Louis (Alméro) Du Pisani ZS6LDP
11 Judy and David Botha ZS6O
16 Riana en Leon Fouche ZS6LEF
20 Helga en Hans-Peter Knoepfler ZS6AJS

Christmas Wishes / Kersfees Wense

Who would have thought that 2020 turned out the way it did? All our best intentions and New Year's resolutions were turned upside down in the blink of an eye. Whether we wanted it or not, all of us became part of global history for all the wrong reasons. Many of us lost family members and friends, and many of us fell ill to this disease but recovered and carried on with our lives. For many of us, this year was a test of human endurance and mental toughness we simply had to pass in order to be able to survive and continue.

Out of anything bad there always come many things good. The human spirit has shown us in these times that we are supremely able to adapt to our circumstances and to improvise and take measures that enables us to survive. Looking back at events the past eight months, we have evolved in a sense mentally in such a way that we look at life and problems from different angles that we may have thought never existed before.

It was such a pleasure and a pleasant experience witnessing the human spirit manifesting into the Ham Spirit, with the airwaves being so busy during these times, and Radio Amateurs from the Pretoria Amateur Radio Club connecting with great enthusiasm during our Bulletins and radio contests. In a sense, the celebration of the 90th anniversary of PARC during this year has been a bitter-sweet experience. Although we could not officially celebrate our great milestone by getting together, the Ham Spirit compensated for that making this year historical in many aspects still. My two-year term as Chairman of PARC has come to an end, and with great pleasure I hand the reign over to Johan de Bruyn ZS6JHB who has served with great success before. Herewith I wish Johan the greatest of success with his term laying ahead. With Christmas and 2021 approaching fast, we wish all our Members and Friends a Blessed Christmas and a prosperous 2021.

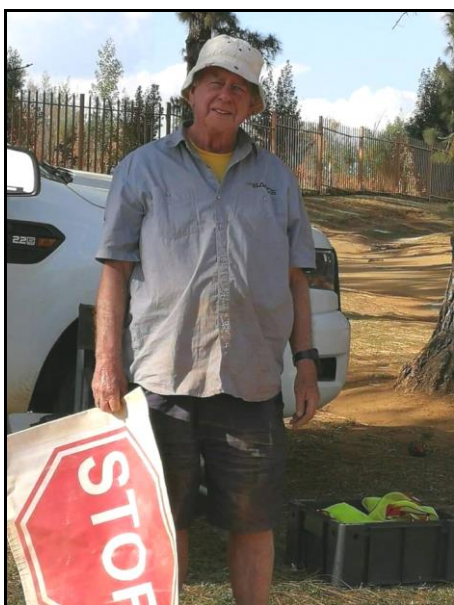
Sincerely and with great appreciation. Louis de Wet ZS6SK

**Lief en Leed: Huldeblyk aan Fritz Sutherland ZS6SF
Joys and Sorrows: Tribute to Fritz Sutherland ZS6SF**



It is with great sadness that PARC announces the passing of Fritz Sutherland ZS6SF after complications during heart surgery. Our sincere condolences to Elsa, children, grand- and great grand children. Fritz served as SARL President for two years from 2015. Fritz was a well-known and loved personality in the Amateur Radio community and was very active in various club activities. Fritz and his wonderful sense of humour will sincerely be missed.

Lief en Leed / Joys and Sorrows



It is with great sadness that we learned of the passing of Tony Crowder, who has been battling with cancer. We fondly remember Tony actively participating with radio support and communications for many years. Tony was also the auditor of the Pretoria Amateur Radio Club financial statements. He will sincerely be missed. Our sincere condolences with Sue and family. **Right photo at Back:** David Brown ZU6DB and sw Marge; **Front:** Tony Crowder ZS6CRO and Johann de Beer ZR6YV during the 2016 SASOL rally



Graag wens PARK vir Sharmaine en Louis de Wet ZS6SK van harte geluk met die geboorte van hul tweede kleindogter Leah op die 12^{de} November. Mag sy baie vreugde vir julle bring!

PARC Membership Fees / PARK Ledegelde

For the 2020-2021 year, there will be no increases in Club Membership fees.

Club Fees therefore remain at R160 for Ordinary Members, and R60 for Pensioners and Spouse. Vir die 2020-2021 jaar sal daar geen toenames in die Klub Lidmaatskap gelde wees nie. Dus bly die gelde op R160 vir Gewone Lede, en R60 vir Pensionarisse en Gade.

PARC SUBS : PARK LEDEGELD : FROM / VANAF : 2020-10-31

Bank	First National Bank	Ordinary Members / Gewone Lede : R160 Spouses / Pensioners : R60	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 Bulletin Roster / PARK Bulletin Rooster

PARC Bulletins are presented on Sunday mornings at approximately 08h45, after the SARL Bulletins in English and Afrikaans, from 08h15. The Bulletin Presenters for the following two months are presented below. Please do contact the applicable presenter beforehand if you wish to make a contribution to the Bulletin. PARC Bulletins are broadcast on the 2-meter repeater on 145.725 MHz, and 70 cm on 438.025 MHz. Relays are done on 7.060 MHz by Hans Kappetijn ZS6KR and on Echolink by Johan Lehman ZS6JPL. A re-broadcast of the Bulletin is done the following Monday evening at 19h45 by Hans ZS6KR.

PARK Bulletins word op Sondag oggende aangebied om 08h45, na die SARL Bulletins in Engels en Afrikaans, vanaf 08h15. The Bulletin aanbieders vir die volgende twee maande word onder aangedui. Kontak gerus die toepaslike Bulletin leser indien u 'n bydrae tot die Bulletin wil maak. PARK Bulletins word uitgesaai op die 2-meter herhaler op 145.725 MHz, en 70cm op 438.205 MHz. Herleidings word gedoen op 7.060 MHz deur Hans Kappetijn ZS6KR, en op Echolink deur Johan Lehman ZS6JPL. 'n Heruitsending van die Bulletin geskied die opvolgende Maandag aand om 19h45 en word behartig deur Hans ZS6KR.

PARC Bulletin Presenters : November 2020 – February 2021

Date	Presenter	Date	Presenter
29 November 2020	Alméro Du Pisani ZS6LDP	17 January 2021	Albert Schreuder ZS6SE
06 December 2020	Johan de Bruyn ZS6JHB	24 January 2021	Alméro Du Pisani ZS6LDP
13 December 2020	Louis de Wet ZS6SK	31 January 2021	Johan de Bruyn ZS6JHB
20 December 2020	Albert Schreuder ZS6SE	7 February 2021	Louis de Wet ZS6SK
27 December 2020	Alméro Du Pisani ZS6LDP	14 February 2021	Albert Schreuder ZS6SE
3 January 2021	Johan de Bruyn ZS6JHB	21 February 2021	Alméro Du Pisani ZS6LDP
10 January 2021	Louis de Wet ZS6SK	28 February 2021	Johan de Bruyn ZS6JHB



Diary of Contests & Events / Dagboek van Kompetisies en Gebeure

Contests and Events – December 2020 / Kompetisies en Gebeure – Desember 2020 (UTC Times)	
01	Start of YOTA Month
01	Worldwide Sideband Activity Contest: 01h00Z – 01h59Z
04 - 06	ARRL 160-Meter Contest: 22h00Z – 16h00Z
05	SARL 95: 40m Club Sprint
05 - 06	PRO CW Contest: 12h00Z – 11h59Z
05 - 06	EPC Ukraine DX Contest: 20h00Z – 19h59Z
08	Worldwide Sideband Activity Contest: 01h00Z – 01h59Z
09	NAQCC CW Sprint: 01h30Z – 03h30Z
12 - 13	ARRL 10-Meter Contest: 00h00Z – 24h00Z
12 - 13	International Naval Contest: 16h00Z – 15h59Z
16	NAQCC CW Sprint: 01h30Z – 03h30Z
18	Russian 160-Meter Contest: 20h00Z – 24h00Z
19	OK DX RTTY Contest: 00h00Z – 24h00Z
19 - 20	Croatian CW Contest: 14h00 – 14h00
22	Worldwide Sideband Activity Contest: 01h00Z – 01h59Z
26	Gedebage DX Contest: 12h00Z – 11h59Z
29	Worldwide Sideband Activity Contest: 01h00Z – 01h59Z
31	End of YOTA Month ; CQ DX Marathon
Contests and Events – January 2021 / Kompetisies en Gebeure – Januarie 2021 (UTC Times)	
01	AGCW Happy New Year Contest: 09h00Z – 12h00Z
05	Worldwide Sideband Activity Contest: 01h00Z – 01h59Z
09 - 10	North American QSO Party, CW: 18h00Z – 05h59Z
10	NRAU-Baltic Contest, SSB: 06h30Z -08h30Z
10	NRAU-Baltic Contest, CW: 09h00Z – 11h00Z
10	DARC 10-Meter Contest: 09h00Z – 10h59Z
16 - 17	Hungarian DX Contest: 12h00Z – 11h59
16 - 17	North American QSO Party, SSB: 18h00Z – 05h59Z
19	Worldwide Sideband Activity Contest: 01h00Z – 01h59Z
21	NAQCC CW Sprint: 01h30Z – 03h30Z
23 - 24	UK/EI DX Contest, CW: 12h00Z – 12h00Z
26	Worldwide Sideband Activity Contest: 01h00Z – 01h59Z
29 - 31	CQ 160-Meter Contest, CW: 22h00Z – 22h00Z
30 - 31	UBA DX Contest, SSB: 13h00Z – 13h00Z
<p>The Pretoria Amateur Radio Club does not accept responsibility for the accuracy of contest details listed above. For verification and more information, please visit the SARL website, www.sarl.org.za, as well as the WA7BNM international contest calendar at the following website: http://hornucopia.com</p>	

Plaaslike Kompetisies / Local Contests



Pretoria Amateur Radio Klub nooi graag almal wat belangstel om aan plaaslike kompetisies deel te neem om vir Albert Schreuder ZS6SE (Komiteelid) en Gerrie Leonard ZS6GTK (Gekoopteerde Lid) te kontak om uit te vind hoe om betrokke te raak.

Pretoria Amateur Radio Club invites all who are interested to participate in local contests, to contact Albert Schreuder ZS6SE (Committee Member) and Gerrie Leonard ZS6GTK (Co-Opted Member) to obtain information on how to get involved.



PARC Veteran's Breakfast / PARK Veterane Ontbyt

The Annual Pretoria Amateur Radio Club Veteran's breakfast took place on the 10th of October at the "Jan se Skuld" restaurant in Montana, Pretoria North. As always, this event was well attended by our veterans and club Members, and was again a great success! Veterans and Members were welcomed by the PARC Chairman, Louis de Wet ZS6SK, who elaborated on the historical significance of this event during the 90th celebration of this Club. Everyone was thanked for their attendance during these difficult circumstances, where-after a delicious breakfast was enjoyed.



Whitey (ZS6JJJ) en Erna Joubert, Gawie (ZS6GJJ) en Elna Basson en Sarel (ZS6EK) en Karen Stapelberg



Hansie ZS6AIK en Roy ZS6XN met vriende

Corrie, Willie, Annelie, Pieter en Irene



Roy Alexander ZS6MI and Joe Katzman ZS6TB

JV ZS6YV, Graham ZS6GJR and Joey Reid



Johan ZS6JHB in gesprek met Hansie en Roy



Roy Newton ZS6XN ontvanger van trekking prys



Voor: Karen Stapelberg, Gawie Basson ZS6GJJ, Elna Basson, Erna Joubert, Joey Reid, Hansie Meyer ZS6AIK, Joe Katzman ZS6TB, JV de Beer ZR6YV en Graham Reid ZS6GJR (Vise Voorsitter)
Agter: Sarel Stapelberg ZS6EK, Whitey Joubert ZS6JJJ, Annelie van Niekerk ZS6AVN, Willie van Niekerk ZS6WVN, Corrie de Bruyn, Johan de Bruyn ZS6JHB, Irene Myburgh ZS6IEA, Pieter Myburgh ZS6PAM, Roy Alexander ZS6MI, Roy Newton ZS6XN en Richard Peer ZS6UK

Pretoria Amateur Radio Klub bedank hiermee graag ons Veterane en Lede wat die suksesvolle funksie bygewoon het. In besonder bedank ons graag vir Johan de Bruyn ZS6JHB en Corrie, Irene Myburgh ZS6IEA en Graham ZS6HJR en Joey Reid vir hul voortreflike reëlings met die funksie. Mag die veterane ontbyt voortleef as 'n wonderlike tradisie van die Pretoria Amateur Radio Klub!

PARC Flea Market / PARK Vlooiemark

Weens die inperkings gedurende 2020 was dit slegs moontlik om een vlooiemark hierdie jaar te hou. Op die 31^{ste} Oktober, wat die Algemene Jaarvergadering voorafgegaan het, is die tafels van verkopers van 10h00 vol gepak met 'n groot verskeidenheid van items. Gesien in die lig van die landswye omstandighede was dit werklik aangenaam om die groot opkoms te ervaar. PARK bedank Alméro Du Pisani ZS6LDP van harte vir sy harde werk en uitstekende reëlings met die vlooiemark, asook Whitey en Erna Basson en Sarel en Karen Stapelberg met die braai en verkope van die worsrolletjies.



Erna, Whitey, Sarel en Karen besig met worsrolle



Ed (UT), Gerrie (GTK), Corlia (CHS) en Pierre (PS)



Linda Lessing ZS6LML en Hans Kappetijn ZS6KR met hul tafels gepak met die gewone verskeidenheid



Almero ZS6LDP geniet 'n worsbroodjie terwyl baie van die verkopers se bakkies vol gepak was



PARC AGM / PARK AJV

The 90th Annual General Meeting of the Pretoria Amateur Radio Club took place on the 31st of October 2020 at the Pretoria Old Motor Club Silverton at 11h30, which followed the flea market earlier the same morning. The Members present were welcomed by the PARC chairman, Louis de Wet ZS6SK. Apologies and proxies were noted, and a quorum declared, as the required number of Members were present. Louis opened the AGM, and proceeded to read the minutes of the previous AGM, which was accepted as a true reflection of the 2019 AGM.

Graham Reid ZS6GJR, treasurer of PARC, presented the audited 2019-20 financial statements of the Pretoria Amateur Radio Club, and reported that the finances of the Club were in a healthy state. The audited statements were accepted and seconded by Club Members. Sadly, due to the passing of Tony Crowder ZS6CRO, who was the auditor of PARC for many years, he could not be re-elected to fulfill this function. The selection of an auditor was postponed to the first meeting of the new Committee to be selected.

Louis de Wet ZS6SK presented the Chairman's report, which is presented below. No motions were submitted for discussion. The election of the Club committee for 2020-21 was conducted, and Johan de Bruyn ZS6JHB, Graham Reid ZS6GJR, Irene Myburgh ZS6IEA, Albert Schreuder ZS6SE and Louis de Wet ZS6SK were elected as Members for the next term. Their portfolios, as determined during a committee meeting on the 12th of November 2020 are presented on page 14. A number of general issues were discussed, and were recorded in the minutes of this meeting, to be presented during the 2021 AGM. Due to Covid measures, no presentation of awards took place, and will take place at a more suitable time and event in future.

The meeting was concluded by a most interesting presentation by Theo Bresler ZS6TVB on the various methods and instruments used for antenna testing. We sincerely thank Theo for his effort and support. All Members were thanked for their presence and support with the AGM. The usual bring and braai followed and Johan ZS6JHB and Corrie, and Graham ZS6GJR and Joey are sincerely thanked for their preparations with the braai, catering and salads.

90th Annual General Meeting of PARC **Chairman's Report: Louis de Wet ZS6SK**

90^{ste} Algemene Jaarvergadering van PARK **Voorsitters Verslag: Louis de Wet ZS6SK**

Dear Members of the Pretoria Amateur Radio Club and Guests:
Geagte Lede van die Pretoria Amateur Radio Klub en Gaste:

Baie welkom aan almal teenwoordig en baie dankie dat julle tyd ingeruim het om die historiese 90^{ste} Algemene Jaarvergadering van die Pretoria Amateur Radio Klub by te woon.

A hearty welcome to all present and thank you very much for all have given their time to attend this historical 90th Annual general Meeting of the Pretoria Amateur Radio Club.

Last year on the 21st of September during the previous AGM I opened the report with the topic "PARC": 90 years and forward", with the words: "With the 90th anniversary of PARC approaching, I see a strong and fruitful future for the oldest amateur radio club in South Africa, and this event will pave the way for the 100th celebration of PARC. Indeed, exiting times lie ahead, and I call on all members to participate and share in the momentous occasion". None of us were prepared for the times that lay ahead. The historical significance of this year need not be emphasized again, but for the Pretoria Amateur Radio Club on its 90th celebration in 2020 was indeed an illustration of how Amateur Radio survived and proliferated even under these difficult circumstances. It is thus a tremendous honor and pleasure to present my Chairman's report to you today.

Silent Keys: We remember with sadness and pay tribute to PARC members Johan Classen ZS6IAM and Tony Crowder ZS6CRO who passed away this year. Johan was the father of Uys Classen ZS6UYS. Tony was well known for many years in the rally community, and was also the auditor of PARC.

Club Membership: PARC membership currently is 125 paid up members, which is an increase of 15% compared to the membership number the previous year. We sincerely thank our Members for their support and loyalty.

Club Veterans: Our annual veterans breakfast has proved to be a tremendous success every year. It is an event where Club Members older than 60 years old get the opportunity to meet, have a good time to converse about their wonderful times they had, and enjoy a meal. This year we had the opportunity to meet at "Jan se Skuld" on the 10th of October, as was attended by seventeen Club Members and seven guests. It was our honour to host the following members which were 70 years and older: Hansie Meyer ZS6AIK, Richard Peer ZS6UK, Joe Katzman ZS6TB, Roy Alexander ZS6MI, Gawie Basson ZS6GJJ and Whitey Joubert ZS6JJJ. PARC sincerely thanks them for their attendance, as well as Irene Myburgh ZS6IEA, Johan de Bruyn ZS6JHB, Graham ZS6GJR and Joey Reid for organizing this pleasant event. May this wonderful tradition continue for many years to come.

I hereby wish to thank the following Committee- and Club Members according to different categories they have contributed to the Pretoria Amateur Radio Club:

Finances: Thanks to the efforts the past two years by Graham Reid ZS6GJR and Etienne Naude ZS6EFN, our accounting system and banking matters have been upgraded and consolidated significantly, such that all transactions are recorded and paid electronically by EFT and cell phone bank applications. Automatic invoices are generated and send by email to Club Members, with the result that our membership payments have increased satisfactorily. We sincerely thank Graham and Etienne for their efforts. During this year, Albert Schreuder ZS6SE, who is a Chartered Accountant, has joined the Committee, providing us with specialized advice on financial and taxation matters. We sincerely thank him for his contributions.

Secretarial: For the past two years, Irene Myburgh ZS6IEA has served with distinction on the PARC Committee as Secretary. Her accurate record taking and swift production of minutes of committee meetings have set a high standard. During the lockdown period, Irene has initiated on-line meetings which have been done with great success. We sincerely thank Irene for her excellent service towards the Club.

PARC Website: Graham Reid ZS6GJR is sincerely thanked for the maintenance and administration of the PARC website, as well as liaising with the host of the domain when problems and issues arise. Our sincere thanks to Vincent Harrison ZS6BTY for the regular contributions on propagation information.

Swop Shop: Hans Kappetijn ZS6KR, who is responsible for the maintenance of the Swop Shop section of the PARC website is sincerely thanked for this essential service the Club provides, not only to PARC Members, but also to many other members of other clubs who use this service. It is always interesting to consult this section and look out for interesting deals. During the lockdown period, this service has proved to be of great value.

Bulletins: Sunday morning bulletins is such an essential medium of Club to Member communications, relaying valuable information and news regarding Club and SARL matters. The number of Members involved is quite extensive, and we would sincerely like to thank the following people for their appreciated efforts:

Hans Kappetijn ZS6KR: Relays of bulletins, English SARL bulletin reading, recording and playback, Call-ins on 40m, Swop Shop, playback of PARC bulletins on Monday evenings, HF- and International Contest news on PARC bulletins.

Alméro DuPisani ZS6LDP: Playback of Afrikaans SARL bulletins and report back on Echolink listeners. Regular hosting of PARC bulletins.

Johan Lehman ZS6JPL: Providing and maintaining the Echolink service and repeater to PARC.

Johan de Bruyn ZS6JHB: Editing of SARL bulletins and hosting of regular PARC bulletins.

Irene Myburgh ZS6IEA: Reading and recording of Afrikaans SARL bulletins.

Albert Schreuder ZS6SE and Louis de Wet ZS6SK: Regular hosting of PARC bulletins.

Repeaters: Johan de Bruyn ZS6JHB for keeping the repeater network operational and dealing with the various issues associated with it. Johan is in regular communication with Greg Jared of Webb Industries who maintains the repeater sites. Unfortunately, the Radcliff site has lately been the victim of regular burglaries, and replacements of batteries and a power supply had to be conducted by Johan.

Rallies: The rally team provides an essential radio communication service at regular events, and their excellent representation of PARC is sincerely appreciated. We thank Johan de Bruyn who is the communications coordinator with these events, as well as his support team, Graham ZS6GJR and Joey Reid, JB de Beer ZR6YV, Irene and Pieter Myburgh ZS6IEA and ZS6PAM, Willie Greyling ZR6WGR, Willie ZS6WVN and Annelie ZS6AVN van Niekerk, Tony Crowder ZS6CRO (SK) and all other members.

Flea Markets: Our most sincere appreciation to Alméro DuPisani ZS6LDP for organising and hosting all-successful flea markets. The flea markets are always well attended by members from other clubs. In addition, we sincerely thank Johan Corrie de Bruyn, Whitey ZS6JJJ and Erna, Kenny ZS6KMM and Paddy, Sarel ZS6EK and Karen as well as Louis ZS6SK for their assistance with the preparation and selling of boerewors rolls and coffee at these events.

Contests: This past year has, even during these difficult circumstances, seen good participation by PARC Members in local and international contests. Under the leadership of Albert Schreuder ZS6SE, local and international contests were well supported by Gerrie Leonard ZS6GTK, Zack Pienaar ZR6ZAK, Pierre Holtzhausen ZS6PJH, Theo Bresler ZS6TVB and Hans Kappetijn ZS6KR. We sincerely thank these members for their hard work while having lots of fun, and encourage members to join them in making PARC again a competitive force with radio contests.

Watts: Having been the editor of Watts the past 4 years has been a tremendous pleasure, and I sincerely thank our Club Members for their treasured contributions. In particular Hans Kappetijn ZS6KR and Vincent Harrison ZS6BTY for their regular contributions, and in particular again Vincent for the electronic distribution of Watts. I have realized that Watts need not only contain radio related topics, and that articles on general science have been well received. My sincere thanks to all have contributed the past four years.

RAE Training: John Minter ZS6LED is sincerely thanked for his hard work and contributions with RAE training and getting prospective radio amateurs registered for the examination. Even during the lockdown period, John has achieved getting a group of prospective hams prepared for the examination, and all of them have passed. A most significant feat he has overcome. PARC sincerely appreciates his contributions.

Ham Spirit: On two occasions have two of PARC members from their own funds in their time fabricated and installed radio masts for our handicapped Club Members. PARC hereby with great appreciation salute Gerrie Leonard ZS6GTK and Zack Pienaar ZR6ZAK for their magnificent efforts in assisting fellow radio amateurs. Andre Coetzee ZS6GCA has been for a number of years been involved with the Kungwini home for the disabled, and has with Gerrie Leonard, set up a ham radio display during their November display and sale of goods manufactured by the residents.

In conclusion, I wish to thank everyone for attending this historical AGM. The year 2020 and associated, but necessary restrictions have placed a severe restriction on Club Activities. However, it did not dampen the Ham spirit. A significant increase in radio activity resulted in a revival in the use of radio communications. We sincerely hope and believe that a great number of good has come from this unfortunate global pandemic. With regards to the 90 years and beyond future of the Pretoria Amateur Radio Club, I propose a number of goals for the next Committee which include the following:

- 1) Due to restrictions encountered this year, the opportunity to host a 90-year celebration function was not possible, and a re-planning of this event should be considered and conducted at a time when conditions are more favorable.
- 2) Although our Sunday morning bulletins are of a good standard, opportunities for improvement should be identified and implemented in order to provide an even better service to our local and international listeners. Contingency plans need to be formulated in the event where the inevitable may occur.
- 3) We are in the process of conducting inspections and evaluations of our current repeater sites, recording all the necessary details of equipment of all the sites. Consequently, using the new electronic registration procedure on the ICASA website, five years in advance license renewals will be conducted using this platform.
- 4) An evaluation of our current website design and layout need to be conducted, and suggestions and participation from Club Members are invited and encouraged. A blog where active participation by club members on various matters should be considered.

If there are any other matters which warrant consideration for our future goals, please feel free to contact the new committee in the near future.

Thank you very much for your attendance.

Sincerely,

Louis de Wet ZS6SK

Pretoria Amateur Radio Club



Theo Bresler ZS6TVB at the 2020 AGM presenting theory and practice of antenna testing

PRETORIA AMATEUR RADIO CLUB: ELECTED COMMITTEE 2020-2021

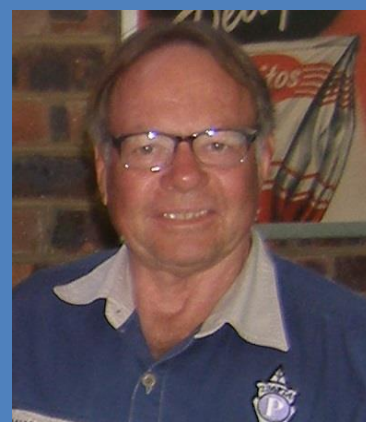
PRETORIA AMATEUR RADIO KLUB: VERKOSE KOMITEE 2020-2021



Johan de Bruyn ZS6JHB
Chairman, Membership,
Repeaters & Rallies, Social



Louis de Wet ZS6SK
Vice-Chairman, Watts, Bulletins,
SARL & ICASA Liaison



Graham Reid ZS6GJR
Treasurer ; Website, SARL &
ICASA Liaison



Irene Myburgh ZS6IEA
Club Secretary, Social



Albert Schreuder ZS6SE
Contests, Social & Finances:
Taxation Affairs

CO-OPTED COMMITTEE MEMBERS

Alméro Du Pisani ZS6LDP: Flea Markets, SARL Bulletins

Hans Kappetijn ZS6KR: SARL Bulletins, Swop Shop

John Minter ZS6LED: RAE Training, Technical

Gerrie Leonard ZS6GTK: Contests, Community Outreach

Pretoria Amateur Radio Club sincerely congratulates the elected Committee and Co-opted Members with their elections. We wish them all the best with their individual tasks and portfolios and thank them for their willingness to sacrifice their time and resources to the benefit of this Club. May the new year bring new hope and challenges and a bright new future. Thank you very much to all Club Members for your support and trust in fulfilling our task. Sincerely: Johan de Bruyn ZS6JHB (Chairman 2020-2021).

HF Revival in the Military: Recent report found on C4IRNET – condensed by ZS6KR

Special operations command across Europe are ramping up their capabilities with high-frequency communications to ensure connectivity on the battlefield. Leaders there are turning to HF communications as a way to optimize properties that provide a low probability of interception and detection.

Special forces in France, Germany, Poland and Ukraine continue to receive HF systems as a way to diversify communications plans. Enhancements in HF come at a time when NATO members and partner forces are suffering from a disruption of satellite communications, particularly along the alliance's eastern flank where Russian armed forces continue to conduct electronic warfare.

In an online presentation on Aug. 6, Paul Denisowski, product management engineer at Rohde and Schwarz North America, described how communications satellites are vulnerable to anti-satellite (ASAT) systems as well as ground-, air- and space-based "kill vehicles." "China, Russia and the U.S. have all carried out ASAT tests and many other countries are developing ASAT capabilities," Denisowski said

To boost resilience, some commands are turning to high-frequency communications. During the presentations "Lost Art of HF" and the "Rebirth of Shortwave in a Digital World," Denisowski explained that HF is making a comeback in local and global communications. This renaissance comes as the result of improvements in a range of fields, including antenna design, digital modulation schemes and improved understanding of propagation as well as reductions in size, weight and power requirements, the introduction of wideband data, enhanced encryption algorithms and interoperability with legacy HF sets.

"This means end users are now benefiting from easier-to-use and cheaper solutions featuring improved data performance, audio quality, availability and operation. And because of a lack of infrastructure, HF is less expensive and relatively robust, although solar events may temporarily disrupt HF communications," he said. Specific upgrades include "Adaptive HF," which comprises automatic selection of frequency and the establishment of communication through automatic link establishment, or ALE, technology.

The latest technology of its type — 4G ALE — is capable of supporting wideband HF communications, or WBHF for short, providing end users with the ability to "negotiate bandwidth, modulation type, error correction and the number of sub-carriers," he explained. "ALE selects frequencies using link quality analysis, which allows it to listen and determine if a channel is in use and adapt if conditions change," he said. He added that HF can now support data rates up to 240 kilobytes per second on a 48-kilohertz channel, particularly useful for more robust communications in hostile environments. "WBHF has already [been] used in military trials. It's a technology which is most definitely here and now."

Similar sentiments from Europe were expressed to C4ISRNET, where armed forces continue to integrate HF technologies into existing and future communications plans. Examples include Germany's Ministry of Defence, which is deciding whether to include an HF requirement as part of its wider Digital Land Based Operations communications program. According to a report by JK Defence and Security, a partner of L3Harris Technologies in Germany, HF communications comprise a viable alternative to satellite communications tech available to European NATO partners.

The report explained how the U.S. Army and European NATO partners explored such scenarios during a series of joint exercises in 2019 and 2020. "A new need arrives for alternative communication skills, justified through the increasing vulnerability from SATCOM jamming as well as the potential failure of SATCOM as a result of attacks on spacecraft or through the use of anti-satellite surface-to-air missiles," the report's author, Jan Pätzold, told C4ISRNET. "The development of alternative skills is important to reduce dependence on SATCOM." According to Pätzold, so-called Skywave HF, which bounces signals off the ionosphere, enables beyond line-of-sight communications across "thousands of kilometers" without requirements. HF communications is also ideally suited to supporting local network coverage. "This offers advantages over SATCOM in urban areas, but also in mountainous areas or far north latitudes where no line of sight to existing satellites is possible."

Long Term HF Propagation for December 2020: Courtesy Vincent Harrison ZS6BTY

The graph below shows the predicted F-layer Maximum Usable Frequency (MUF) for propagation from Pretoria^[1] using monthly sunspot numbers from SILSO^[2].

Local Propagation (up to 500 km): The F or F2 critical frequency (f_oF_2) is the MUF for short range, near vertical incidence sky-wave (NVIS) propagation.

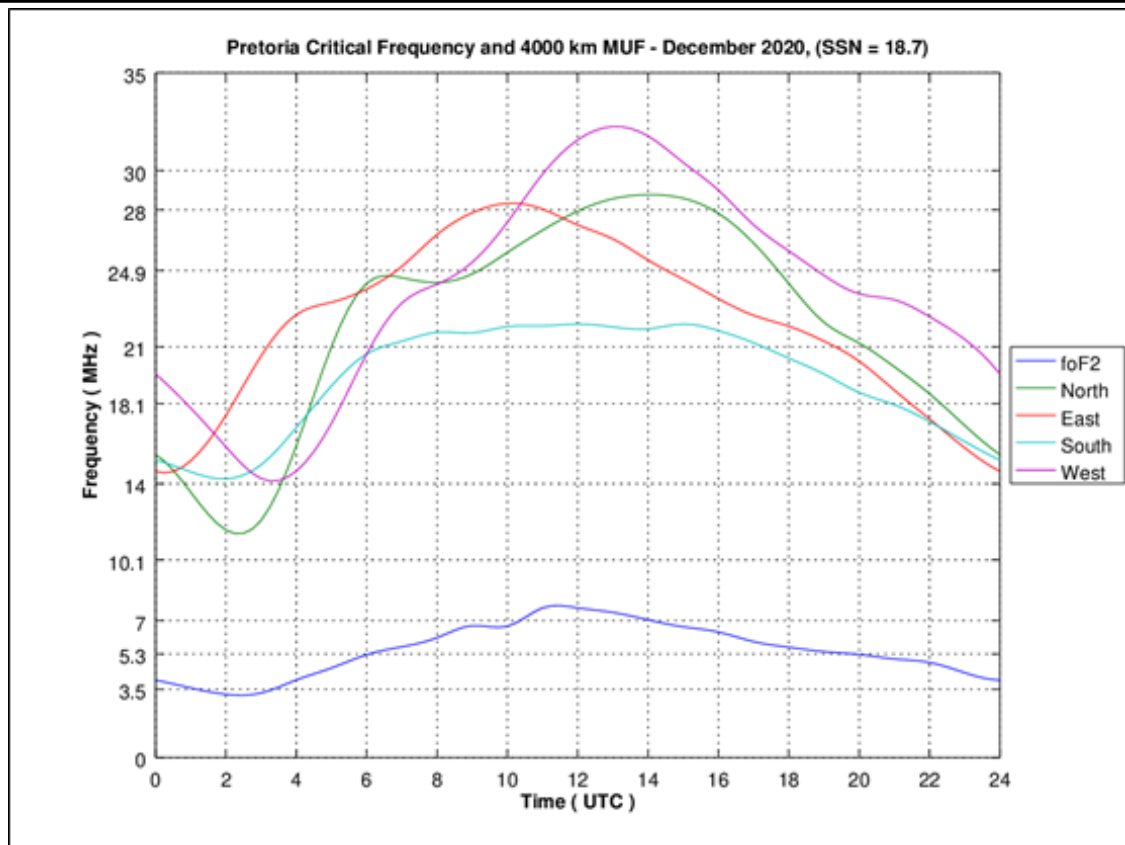
Long Distance Propagation: The MUF for a first hop of 4000 km in the cardinal directions is labeled North, East, South and West. They indicate the direction that propagation may be expected.

Worldwide Propagation Maps: <http://www.parc.org.za/index.php?page=propagation>

"Prediction is difficult, especially when dealing with the future" . . . Danish Proverb. 73 Vincent, ZS6BTY

^[1]FTZMUF2: A simple method of estimating the ionospheric parameters of f_oF_2 and M(3000) with the aid of a home computer - Thomas Damboldt and Peter Süßmann, Deutsche Bundespost, December 1988.

^[2]Silso 12-month forecasts of the monthly sunspot number (<http://sidc.oma.be/silso/FORECASTS/prediML.txt>)



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