



October 2023



This Newsletter is published by the Port Elizabeth Amateur Radio Society

> P.O. Box 10402, LINTON GRANGE, 6015 Editing by Ashley Goosen ZS2AG

QSX-PE - Newsletter for the discerning Radio Ham

Next PEARS Monthly Meeting

Will be at the Italian Club on the 17th October 2023 at 17h30



From the Chair

From the Chair:

Well no sooner than we have shifted back to the Italian club with our monthly meetings and the manager who promised to look after us has resigned and our venue is in jeopardy again.

It seems the club is as unreliable as the Italian sports cars. We are working on getting the situation resolved so please keep your ears and eyes

open for announcements as to where the next meeting will be held. On behalf of the committee I wish to extent our sincere apologies for this situation and know we are doing what we can to sort it out. It goes without saying we are trying to sort out the year end function as well, and will let everyone know in due course as to what is happening in this regard.

We have an exciting Raffle, which see a nice Yaesu FT4XE Dual band handheld up for grabs. Tickets are only R50 and how you get it is by paying your money into the PEARS bank account and using your Callsign and the word Raffle as the reference. Mike ZS2MIC and Chris ZS2AAW will then allocate you tickets based on the multiples of R50 you have deposited. We hope to have the drew at our supper evening but definitely Before Xmas so someone will have a nice new toy for their stocking this year. Please support this initiative as the funds are in lieu of repairs to Lady Slipper high site after we have been the target of thieves twice in the past month.

Please support the club further by attending the monthly meetings and bring a friend, and of course listen to the bulletin on a Monday Evening and call in after the fact.

For those of you who have tuned in early may have noticed a show presented by Hans ZS6AKV call amateur radio today, being broadcast from 7pm to 8pm just before our bulletin. This is an interesting show directed at you! Listen you may learn something. My Thanks to Rory ZS2BL for taking care of this transmission for us.

That's it from me for this time.

Most importantly "Say Hello"!

PEARS, WE LIKE BEING YOUR CLUB

73,

Donovan, ZS2DL

FROM THE EDITOR

Here's wishing you happy reading this edition of QSX and if you have an article or two that you would like published in future copies of QSX, please let me have your contribution by email to qsx.zs2ag@gmail.com. Please do not send me QSX material on WhatsApp as I am inundated with WhatsApp messages and I will miss your material.

Thank you for your continued support of QSX and the articles you have submitted for this issue.

73.

Ashley ZS2AG

Minutes of PEARS Monthly Meeting

Held at the Italian Club on the 19th September 2023 at 19:30

Welcome:

Chairman Donovan ZS2DL welcomed all present.

Attendance:

Approximately 16 attendees. As per Register.

Apologies:

ZS2BIC, ZS2JS, ZS2JD, ZS2PDS, ZS2AS, ZS2DK, ZS2CHA,

ZS2KU, ZT2BC, ZR2BK, ZS2JIM, ZS2AG

Acceptance of previous meeting's minutes:

Proposed: ZS2BO

Seconded: ZS2DH

Matters arising:

None

Finances:

Mike has reported that all is in order.

Committee agreed to transfer funds to the investment account.

General:

ZS2DL

Special thanks to Ashley (in his absence) for another great QSX edition. Please continue to support him with articles.

Lady's Slipper suffered a break-in, the new 200Ah battery and Computer were stolen. Cabin, camera and

alarm got damaged. A fund was initiated for repairs, but steps to be taken to secure the site. ZSZNT has offered to manufac-

ture a false floor to hide the batteries, and possibly an internal security gate. We will try to make it as difficult as possible to succeed again. Thankfully no loadshedding at the moment - obviously no battery backup if it does get loadshed. A case was opened at Kabega station. Multiple sites were affected that evening. ZR2BK will report back when info is available. Slipper is important for events in the area. Thankfully it is still alive.

7 October at Walmer Town Hall is the Hobbies Fair. Paul ZSZPS has arranged the stand. Would be great to have some support. O8hO0-13hOO.

Those that didn't attend the past Saturday antenna day, missed outll Thanks to ZSZVR for all the prep. 9 people made antennas, and all worked fine before the end of the event.

Fox hunt needs to be arranged, now that the antennas are ready! Will discuss with ZRZBK, may need to postpone to next year.

End of year function: ZS2DL has booked the 24" November 18h3O for 19hOO. Hosts are keen to do a proper job this year. There will be the usual booking form on Google. Fish and Chips, may be a choice of some Pizza, or Pastas and a vegan option. Desert - ice cream and choc sauce sponsored by the club.

Details will be circulated as per last year. Some partners of silent keys to be invited as guests of honour.

Yaesu Verstay have FT-4X E dual band VHF/UHF handhelds on special, club could get one as a raffle and draw the winner at the Supper Evening. Tickets at R50 ea. Could set a reserve and only rattle when the target is met. Run it nation-wide. Google form to be setup.

ZS2GV

Cockscomb DC supply also needs attention as and when the SAPS can arrange to get up there with their chopper. DC attects all site users

ZS2AAW

Gave a report back on the Town repeater battery installation, and IRLP status. Looking at replacing the IRLP/Echolink PC with a Raspberry Pi, simpler to keep alive during loadshedding...

ZR2TX

Crossways trail run — 30" September. Tony needs another 2 or 3 volunteers.

December 13-I7 December — LoFER event is longer and bigger this year. May need to work shifts because of the long time lapses. IVlore details about the route will come later.

ZSZG

7 October 'l4hOO-15h3O HAMNET meeting at ZS2G. 47 Barton Rd, Cotswold. Please let Andrew know so he can arrange sufficient seating etc.

ZS2G

Andrew handed out the prize for those who submitted colouredin Smith Charts. Prizes went to Odette 1st and Trevor 2nd.

ZS2GS

Coming Friday, plan is to set up the Parks on the air during SANPARKS week at Jack's Picnic site. Gates open at O7hOO, estimate O8hOO at Jacks. All are welcome.

ZS2VR

And ZS2DH at Graaf Reinet 25" Sept on Hanglip, running 40m

HF.

Closure:

Meeting ended at 20h24

Next meeting 17" October 2023.

Paul ZSZPS presented some pics of his recent Namibia trip

CHAIRMAN SECRETARY

DONOVAN VAN LOGGERENBERG (ZSZDL) CHRISTOPHER SCARR (ZSZAAW)

Representing South Africa at the World Radiosport Team Championship in Italy

By Uli Ann, ZR2A / DM5EE

(See Cover Picture)

This year's World Radiosport Team Championship (WRTC) took place near Bologna, Italy in July of 2023. The event had been scheduled for 2022 but had to be postponed due to the pandemic and Russia's attack on Ukraine. WRTC is also considered the Olympics of amateur radio contesting because of its 4-year cycle and I had the privilege of representing South Africa this time. Here is some background about WRTC, how I was able to qualify for it and how the event went down.

What is WRTC and what is so special about it?

The World Radiosport Team Championship (WRTC) is considered the ultimate competition in amateur radio contesting. This unique event is held eve-

ry four years and attempts to eliminate the most important outside factors impacting contest performance, such as geographic location, terrain, different antenna installations and transmit power levels. The idea is to create a level the playing field for everyone and let operating skills alone determine the outcome.

In order to achieve equal conditions for everyone, WRTC events take place in one geographic region and all participants use the same antennas and output power. Another characteristic of the competition is that the callsigns of each team are not know beforehand and the competitors are prohibited from identifying themselves in order to avoid "cheerleading" by friends and supporters on the DX cluster or by other means. A referee is assigned to each team to make sure that the rules are followed.

The first WRTC was held in 1990 in Seattle and since then, another eight such events have taken place, typically separated by four years between them due to the effort involved in organizing them.



WRTC is a very exclusive event and typically provides about 50 to 60 spots for participants from all over the globe. South Africa has been represented by ZS6EZ, ZS4TX and ZS6NW (now N3NW) in the past, most recently in 2006. Since then, African presence at WRTC has been sparse and only three stations from EA8 represented the continent in the WRTCs before *WRTC 2022*. The lack of contest activity from Sub-Saharan Africa led organizers of previous WRTC events to tailor the qualification areas to only include one team from the African continent. Competing against a decent North African station from ZS is a lost cause in all-band DX contests, so Southern Africa has not been represented since 2006. Fortunately, the organizers of *WRTC 2022* wanted more geographic diversity and ended up creating spots for three African regions: Northern Africa, Central Africa as well as Southern and Eastern Africa, the latter including islands in the Indian Ocean all the way to Mauritius

How did I get there?

I have been participating in contests since I passed my license exam in 1983 in Germany. Aside from many contest activities with a modest setup from home, I took part in several Multi-operator events from Germany and Luxemburg, as well as operations from Morocco and Montserrat island in the Caribbean. Solo contest trips also brought me to the Canary Islands and to Tunisia and I gained quite some experience in contesting over the years.

Having served as a referee in the previous *WRTC 2018* in Germany, I had a taste of the event. However, competing at WRTC is a privilege which is earned by going through an intense and exhausting qualification process of

typically two years. In the case of *WRTC 2022*, there were 24 DX contests in 2019 and 2020 of which the twelve best results counted towards the final qualification score.

I had come to South Africa in mid-2018 on a three-year work contract and thus had a chance to take part in the WRTC qualification in 2019 and 2020. Since I did not bring any radio equipment with me, I was fortunate to receive support from Andrew ZS2PA, Donovan ZS2DL, Werner V51JP, Michael V51Q and South Africa's contest legends and WRTC veterans Chris ZS6EZ and Bernie ZS4TX, in particular by getting the opportunity to operate from competitive stations in South Africa and Namibia.



ZR2A/4 before operating ARRL Contest CW at ZS4TX in February 2020

My biggest competitor for the WRTC spot in the region was Mario, FR4QT who I managed to keep at bay eventually after three pre-Covid contest trips to V55A in Namibia. More about my path to *WRTC 2022* can be found in a PEARS newsletter at https://www.zs2pe.co.za/Newsletter/QSX%202021-01.pdf

There was hardly any serious participation from South African or Namibian stations in the qualifying events and next best South African Barry, ZS2NF sadly became a silent key in 2021.



AF3

LEFT: 20 WRTC 2022 qualification scores in region

AF3 (Southern and Eastern

Africa)

After earning the qualification spot for *WRTC 2022* in late 2020, it was time to select a team mate, because, as the name implies, WRTC is a team event. The two operators have to work well together in order to be successful. The team mate could be selected from anywhere in the world but had to have a minimum of 4000

qualification points and be in the Top 10 of the corresponding qualification area. I went with Holger DL9EE from my native country because he is a good operator and because I had returned to Germany in August of 2021, so it would be imperative to have the possibility to meet, prepare and test the set-up together.



Testing the station set-up for WRTC at DA0T

The organizers of *WRTC 2022* chose Multi/2 mode for the event, meaning that both operators can transmit and receive independently of each other. This has implications for the equipment because there would only be one triband beam (10-15-20m) and two dipoles (40 and 80m) available on a 12m tower. Band filters and triplexers were necessary in order to have one operator transmit on one band, e.g.,15m with 100 Watts, and the other operator

simultaneously receive weak signals on another band, e.g., 10m, without interference or even damage to the radios. It took us a while to procure needed equipment, set up the station and through several test sessions and preparation contests we were able to work out the bugs, especially most inter-station interference issues.

The event

In July of 2023 it was showtime. We drove 1300km from northern Germany all the way to San Pietro Terme near Bologna one week before the contest with a car full of gear, spare equipment and whatever stuff we might need. Both Holger and I never competed in a WRTC before, so our secretly held hope was to finish in the middle of the pack around 30th position which would prove that we could keep up with the best contesters in the world.

The event itself was a lot of fun, a week-long meeting of well-known contesters from all over the planet, coming from places like New Zealand, Australia, Brazil, Chile, French Guyana, Malaysia, Tajikistan, Thailand, China, Japan, USA, Canada, many European countries, etc. The other two African teams were composed of EA8RM and EC2DX as well as 5T5PA and KF5EYY/3V8SS. There were also Russian and Ukrainian participants present – fortunately, the atmosphere remained calm. In order to deal with the situation created by the Russian war on Ukraine, no flags were allowed during official events.

The organisation of *WRTC 2022* was by no means perfect though significant challenges had been caused by the pandemic, the war in Ukraine and severe flooding in the Emilia-Romagna region only two months before event.

There were several issues which could have been avoided by better preparation and planning but it did not impact the overall good mood of the attendees and food was very good!



Opening Ceremony of WRTC 2022

After meetings, briefings and the assignment of referees during the week, the drawing of the operating site took place on Friday around noon. We then headed out to our location, some 30km from the event's headquarters. In contrast to recent WRTCs where operations occurred Fieldday-style from tents, the operating sites in Italy were existing buildings in the flats of the Po river. The organizers had selected many *Agriturismo* sites on farms which offer tourist accommodation but also, airport hangars and garages were used as shacks for competitors. While this eliminated the need for tents and generators, it increased the risk of local QRM and other influences and a few teams were hit hard by problems.



Our operating site north of Bologna

When we got to our site about 24 hours before the contest, we discovered some noise, especially on 20 and 40m, obviously coming from three large solar panel installations within 100m of our antenna. However, the issues were relatively minor compared to problems at some of the other locations. We set the station up and started testing right away. There was unexpected inter-station interference on some bands which we brought down to bearable levels over the course of Friday afternoon and evening using filters and ferrite toroids and re-routing of the coaxial cables. Another problem was the 80m dipole which had a bad SWR, probably due to the closeness to buildings and structures. The organizers along with the referee on site allowed us to rearrange the antenna and after a few tries, the dipole's SWR was good.

After a fairly good night's rest, we finished setting up the station and computers on Saturday morning and then waited for the competition to start at 1200 UTC. We had to turn the radios' volume levels to zero at 1130 UTC and our callsign I42M was revealed to us 15 minutes before the start. We set up the logging software in the computers, programmed the voice memories in the radios and at 1200 UTC we took off on 15m and 20m CW. We did not have much of a strategy, except that Holger would primarily cover the expected 'money band' 20m while I would try to get the best out of 15 and 10m in the first hours of the contest. We had learned from the logs of previous WRTCs that we would have to be very agile and often change bands and/or modes when the QSO rate was dropping.



Operating as I42M during WRTC 2022 with our referee Mike, KC7V watching

We had a good start with hourly QSO rates between 200 and 300 until night-fall. Like all teams, we operated non-stop for 24 hours and the referee had to stay awake during that period too which is definitely much tougher than operating the radio. Our station held up during the entire contest, nothing broke and all the spare equipment remained packed in its place. We ended up with 4410 valid QSOs with 109 different countries. We even made 4551 QSOs in 24 hours when you include duplicate QSOs and QSOs removed due to errors on our end, which comes down to an average of 93 QSOs per hour per operator for the entire 24 hours. Our operation was heavily slanted towards CW with three quarters of contacts on morse code and only 25% SSB. South Africa was logged three times - ZS4TX found us on 15 and 10m and we worked ZS1C on 40m. V51MA was the only Namibian station in our log.

ummary - 14	2M					x
BAND	CW	SSB	DXCC	HQ	POINTS	AVG
80	336	117	37	23	1074	2
40	584	442	57	30	2827	3
20	1347	234	77	39	5316	3
15	842	165	79	36	3649	4
10	253	138	56	25	1085	3
TOTAL	3362	1096	306	153	13951	3
FINAL SCORE:6 403 509						

Our QSOs and multiplier per band and total score

I have to mention our site manager Laura IZ4MPI, who did an incredible job keeping us well fed and caffeinated;). I had followed the advice of a fellow seasoned German contester and ate very little during the 24 hours which worked astonishingly well.



Our site manager Laura IZ4MPI, Uli ZR2A, Holger DL9EE and our referee Mike KC7V

The outcome

WRTC competitors do not receive any information during the contest about the current standings, so it was only after the contest that we heard what our efforts had yielded. We were both completely amazed to learn that we were well in the Top 10, initially in 7th place and eventually finishing 6th after the log checking process because we had made fewer errors than a team closely in front of us. We had even been leading the entire competition for the first seven hours of *WRTC 2022*! With nightfall, a few more experienced teams passed us, but we held our own in the top group all through the night into the

next morning and until the end of the contest. Years of hard work qualifying and preparing for the even had paid off. This is the best finish of any African team in WRTC history and we were also the best newcomer team as every team member who placed ahead of us had operated in at least one WRTC before.

WRTC2022 Competition Final Score

WRTC 2022 FINAL SCORE: Open here

CALL	OPERATORS	SCORE
144W	UW7LL VE3DZ	7072327
143C	DJ5MW DL1IAO	7005690
149D	9A7DX 9A3LG	6655540
147M	F8DBF F1AKK	6581376
147L	ОМЗВН ОМЗGI	6311240
142M	ZR2A DL9EE	6254448
147V	SV2DSJ LZ3	5986444
142G	K5ZD W2SC	5945800
143Z	RW7K RA9P	5945500
147K	LY4A OM3RM	5855040
149M	NN3W N3QE	5852952
149A	KD4D KE3X	5843929
144X	FC2DX CTIII T	5831630

Top Scores of WRTC 2022 (IMAGE: WRTC_result.jpg)

The other two African teams finished in position 33 (Team AF1 - EA8RM EA2W) and 58 (Team AF3 - 5T5PA KF5EYY) out of 58 teams.

WRTC 2022 was closed on Monday evening with several speeches, awarding trophies to the top three teams, with the closing ceremony and a joint dinner. This was the only opportunity to meet and mingle with the entire group

of participants during the event as the organizers had split us over four different hotels. Holger and I enjoyed the evening very much until we had to leave when the venue was closed at midnight.



Joint dinner after the closing ceremony (IMAGE WRTC_Dinner.jpg)

WRTC 2022 was an unforgettable event and it went better than my team mate and I had ever imagined. I am proud to say that we put South Africa on the map of WRTC and contesting. There will hopefully not be another decadelong hiatus until ZS is represented at a World Radiosport Team Championship again. WRTC 2026 will be held in England – any takers…?

Again, many thanks to the South African and Namibian amateurs who made this unique experience possible!

73! Uli ZR2A / DM5EE

More information about WRTC is available at https://wrtc2022.it and

Radio Magazine

WORLD RECORD: The longest medium-wave antenna in the world was Russian. It was more than 3,000 metres long and consisted of a long row installed in a straight line. The pylons were down and supported the antenna wires.

This antenna was of the Cetteapa "type (Zarya) and was known for its great direction. Alas, I never did get the radiation numbers and curves. She was at radio station No. 7 next to the village of Odinsk, near Angarsk, in Irkutsk Oblast, in Central Siberia. (52°25"I 9"N of 37 pylons, fifty metres high,

It was built in 1967 and used for broadcasting Radio Moscow and The Voice of Russia on 1080 kHz for broadcasts to Mongolia and China.

Center #7 was broadcasting in short, medium and high tide.

He had also held an important role in the disruption of Western broadcasts.







Birthdays and Anniversaries

Birthóays

October

20 Jimmy De Scande ZS2JIM

26 Patricia (Patsy) Kruger ZS2PTY

27 Edward (Ted) Smook ZS2TED

29 Bennie Greyling R2BC

29 Pat Pullinger ZS2PJP

November

01 Michael Nolan ZS2MHN

03 Dwane Dicks ZS2DBD

05 Andre Botes ZS2ACP

05 Albert Brand ZS2BA

08 Martin Ras ZS2MR

13 Neill Purdon ZS2NIL

13 Johan Swart ZS2PDS

Spouse Birthdays

October

24 Cathy Gerstle Wolf ZS2WG

November

20 Monique O'Donoghue Kev ZS2KO

21 Shaunna Laaks Gary ZS2GRL

26 Isolda Hosten ZS2IW Eric ZS2ECH

Anniversaries

October

24 Al Jo Akers ZS2U ZS2W

November

05 Isak Bettie Greef ZS2ZG

19 Jacques Cecilia van der Heide ZR2JH

DISCLAIMER

Please note:

The Editor, nor any PEARS club member shall be held liable for errors and/or omissions in any article and/or drawing contained in this newsletter. Furthermore, any view expressed is not necessarily that of the Editor, any committee member or other members of the Club. The material contained in this newsletter is not meant to defame, purge, humiliate and/or hurt someone's person or feelings.

If copy is unintentionally infringed, we apologise. The newsletter is published as a free service to Amateur Radio Operators and friends.

SUNDAY SARL AND MONDAY EVENING PEARS BULLETINS

PEARS provides a local reading of the SARL bulletin every Sunday morning at 8:15 in Afrikaans read by Kevern ZR2BK and 8:30 in English read by Rory ZS2BL, transmitted through the Town 2M Repeater on 145.650 MHz.

PEARS bulletins are transmitted on Monday evenings at 20h00 on the Lady's Slipper repeater, 145.700 MHz, 88.5Hz, Narrow and 438.700 MHz, no CTCSS Wide. (Standby option is 145.650MHz Town repeater 88.5Hz, Narrow)

Bulletin Roster				
16-Oct	Donovan	ZS2DL		
23-Oct	Kevern	ZR2BK		
30-Oct	Chris	ZS2AAW		
06-Nov	Mike	ZS2MIC		
13-Nov	Dave	ZS2DH		
20-Nov	Ashley	ZS2AG		
27-Nov	Jimmy	ZS2JIM		
04-Dec	Paul	ZS2PS		

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SARL liaison, Hammies, Youth, Contest Scoring	Dave Higgs	ZS2DH	om[at]zs2dh.co.za	O82 387 5657	
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PEARS' VHF/UHF, Packet & Other Services

Local Repeaters: These repeaters form a separate sub-net in the PE - Uitenhage - Despatch area.				
Town VHF 145.050/650 88.5Hz, Narrow 12.5k	Longmore 145.025/625 88.5Hz, Narrow 12.5k	Uitenhage 145.075/675 Wide 25k	Town UHF 431.050/438.650 Wide 25k	< IRLP available on this subnet
Cockscomb	Viewlands	< These form	DMR	D-Star
431.000/438,600	431.075/438.675	linking hubs for	430.675/438.275	145.175/775
Add 88.5Hz for squ tall	Add 88.5Hz for squ tail	events, hence no tail	QTH: ZS2VA	QTH: ZS2N

Cape Linked System Repeaters:

These form the PEARS long-range 2-metre repeater system, in conjunction with the Border, Southern Cape and WCRWG systems. See www.zs2pe.co.za/Repeaters/repeaters.htm for more details.

Lady's Slipper	Grahamstown	Cradock	Noupoort (link only)
145,100/700	145,150/750	145,050/650	438,750 / 438,675
88.5Hz, Narrow 12.5k	Wide 25k	Wide 25k	Wide 25k
Colesberg 431,075/438,675 Wide 25k	Kareedouw 145,125/725	Plett 145,175/775	Brenton 145,075/675
	APRS/Pack	et network:	
ZSONTP Node	ZSOKDK APRS Digi	ZSOKDB APRS Digi	
Lady's Slipper	Mount Road	Longmore	
434,800 1200bd	434,800 1200bd	434,800 1200bd	

VHF Beacon: 50,007 MHz FSK - ZS2X, 25 Watts into 2 element Yagi beaming north

439.850 9600 bd

Banking details (for subs & donations): NEDBANK SAVINGS ACCOUNT No. 221 252 7594, Bank code 121217, A/C name: Port Elizabeth Amateur Radio Society. Please use call signs as a reference.