

# October 2024



This Newsletter is published by the Port Elizabeth Amateur Radio Society

Editing by Ashley Goosen ZS2AG

# Next PEARS Monthly Meeting will be on Tuesday, 15th October at the <u>Italian Club</u>.

# From the Chair



Dear Members,

It is incredible how the end of the year is approaching so quickly.

Our next meeting takes place on the 15<sup>th</sup> of October at the Italian Club. The annual year end function takes place on the 15<sup>th</sup> of November, and the menu will be published. A reminder to get your raffle tickets for the draw of the Yaesu Handheld that is

up for grabs. Simply go to our website, <a href="www.zs2pe.co.za">www.zs2pe.co.za</a>, click on the year end raffle icon on the landing page, and fill in your details to buy a ticket for only R50. Finaly make payment into the PEARS bank account using your callsign and the word Raffle.

There will also be an attendance draw and up for grabs is a voucher to the value of R500-00. The details of the voucher will only be announced on the evening. Note that you must be there to win it!

I also wish to remind and encourage all members to join the Monday evening bulletin at 20h00 CAT on the Lady Slipper Repeater. Even if you are just listening, let us know you are there. The call ins lately have been poor, please come up and say Hello!

Chris, ZS2AAW has managed to get the DMR repeater working again, so soon it will find its home once again on top of Lady Slipper. Batteries are

being procured for the Longmore Repeater, and there is some tower work to be done. A special thanks also Neil, ZR2NT who is constructing an indoor security gate for the Lady Slipper container. Should you wish to help on the repeater sites, please let me know so that we can go as a group out. Even passing tools arounds, painting, pruning bushes must be done! You do not have be technically involved to help.

On the events side, the Longmore Endurance Forest Run is our final event for the year, taking place in December. Please let Tony, ZR2TX know if you are available. This event requires camping in the forest.

Finally, we wish all the RAE candidates writing their exam all the best and hope to catch them on the air soon.

73, Kevern, ZR2BK Chairman

# FROM THE

Here's hoping you enjoy reading this edition of QSX. 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 17th September 2024 at 19h30

### Welcome:

Chairman Kevern ZR2BK welcomed all present.

### Attendance:

Approximately 13 attendees. As per Register.

### **Apologies:**

ZS2SG, ZS2PS, ZS2MIC, ZS2DL.

### Acceptance of previous meeting's minutes:

Proposed: ZS2AG Seconded: ZS2RT

### Matters arising:

None

### Finances:

Mike has reported (in his absence) that all is in order.

Batteries for Longmore were returned and refunded in full. All events have refunded in full too. One more event for the year, that being the LoFER in December.

### General:

### ZR2BK:

ZS2G has informed us of the Van Stadens Flower Reserve open day, on 28 September (Saturday) and will set up a field station. 07h00 – 14h00.

QSX articles are scarce, please support Ashley. Some had promised articles but haven't provided as yet... you know who you are

Longmore Baviaans UHF Link antenna is dangling on the tower, needs replacement. UHF Link to Slipper also faulty and was removed. Batteries will be sourced and then a work day will be arranged.

Bulletins are on Slipper stand-alone. Attendance is poor, maybe need to send reminders just before time each week. Slipper also has no battery backup, so if power is down, please use 650

Jamtin cupboard/drawers – please fetch it if anyone wants the drawers, or scrap it. Need the space for a workstation area.

Colin's daughter has taken over the Scout Hall facilities and liaison with PEARS
HF Field day moved to Island Reserve, 6 supporters joined for the day. Propagation
was poor, mostly 20m contacts. 36 contacts, log sent in, using ZS2PE callsign.

Raffle – reminder to get your tickets via the web page and payment via EFT Year End Function, set for the 15<sup>th</sup> November, to be confirmed.

SOTA weekend this past weekend, lots of activity.

RAE has seven candidates, registration closes soon. 19 October is the exam  ${\sf JOTA}$  is 19-20 October

YOTA is the whole of December

### Closure:

Meeting ended at 19h52

Next meeting 15<sup>th</sup> October 2024

Andrew ZS2G demonstrated the use of a radio test set to align and test radio equipment.

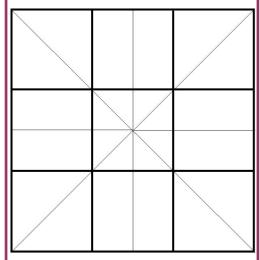
CHAIRMAN

KEVERN BURGER (ZR2BK)

SECRETARY

CHRISTOPHER SCARR (ZS2AAW)

# FROM AL, Z52U



Each block of the square is a number (1-9).

Every row, every column and both diagonals add up to 15.

See if you can solve this.



# A Letter to all PEARS Members

### Dear Club Members

I want to take a moment to encourage each of you to get involved in our club's activities and initiatives.

Amateur radio is more than just a hobby; it's a way to connect, learn, and share our passion with others. Whether you're a seasoned operator or just starting out, there's a place for you in our club. Here are a few reasons to dive in and participate:

- 1. Learn and Grow: Every event and project is an opportunity to expand your knowledge and skills. Whether it's a workshop, a field day, or a special event, you'll find something new to explore.
- 2. Build Community: Our club is filled with diverse members who share a common interest. Getting involved is a great way to forge friendships, share experiences, and support each other.
- 3. Contribute Your Skills: Each of you brings unique talents and perspectives. Whether you're great at organizing, teaching, or just have fresh ideas, your contributions can make a significant impact.
- 4. Have Fun: Amateur radio is all about enjoyment! Participating in club activities not only enhances your experience but also adds a sense of excitement and camaraderie.
- 5. Give Back: As radio operators, we have a special role in our community. By getting involved, you can help us promote the hobby, support events, and be a resource during emergencies.

I encourage you to attend our upcoming meetings, volunteer for events, or even lead a workshop. Your involvement can inspire others and strengthen our club. Let's work together to make this an even more vibrant and welcoming place for all.

7	2	
1	J	

Kevern

ZR2BK

# PROPAGATION CHATTER

By Dave ZS2DH

# Indices to watch for HF propagation

If you have heard of the SFI, the K and the A indices you might be wondering what they are. We often see these indices on various websites. In fact, you can load the widget into your own website too – as I have done on www.zs2dh.co.za. Chances are you have also heard of the LUF and MUF.

# 1. Solar Flux Index (SFI)

The Solar Flux Index measures the amount of solar radio noise at a frequency of 2800 MHz (10.7 cm wavelength). It is expressed in solar flux units (SFU).

Higher SFI values indicate increased ionization in the ionosphere, which enhances HF propagation. Basically, the higher the better, and anything above 100 SFU means good dx!

## 2. K-index

The K-index quantifies disturbances in the Earth's magnetic field on a scale from 0 to 9, with higher values indicating more significant geomagnetic activity.

So, we want lower K-index values. Values in the range of 0-3 indicate quiet geomagnetic conditions, great for HF propagation. Values higher than about 5 indicate geomagnetic storms which can lead to signal fading and absorption.

# 3. A-index

The A-index is a daily average of the geomagnetic activity measured by the K-index. It provides a longer-term view of geo-

magnetic conditions.

The A index, being based on the K index, might suggest we want a low value, right? Yes, the lower the A-Index the more we smile. Values below about 7 suggest stable conditions while anything higher indicates disturbed/unpredictable conditions which are not that much fun.

# 4. Maximum Usable Frequency (MUF)

The MUF is the highest frequency at which a radio wave will be reflected to Earth. A frequency above the MUF will be lost to space.

As you can imagine, the higher MUF values indicate better conditions for higher frequency HF communication. Solar activity can increase the MUF by enhancing ionospheric ionization, but more of that in a later article in the series!

# 5. Lowest Usable Frequency (LUF)

The LUF is the lowest frequency you can use. Signals on frequencies below the LUF are heavily absorbed by the ionosphere, particularly by the D layer during the daytime. This means the signal is too weak to reach the F-layer and get reflected to Earth.

So, in summary, everything a growing Ham needs is a high SFI with low K and A indexes and a frequency between the LUF and the MUF.

Make sense now?

Until next time, 73

# YEAR END RAFFLE

# ENTER TO WIN A YAESU FT-4X





# TICKET AT R50



GO TO WWW.ZS2PE.CO.ZA AND CLICK ON THE LINK TO BOOK YOUR TICKETS. EFT INTO THE CLUB'S BANK ACCOUNT AND USE YOUR CALL SIGN AND RAFFLE AS REFERENCE.

THE DRAW IS PLANNED TO TAKE PLACE AT THE END OF YEAR FUNCTION IN NOVEMBER.

# Birthdays and Anniversaries

# Birthóays

### October

26 Patricia (Patsy) Kruger ZS2PTY

27 Edward (Ted) Smook ZS2TED

29 Bennie Greyling ZR2BC

29 Pat Pullinger ZS2PJP

### November

03 Dwane Dicks Dwane

05 Andre Botes ZS2ACP

05 Albert Brand ZS2BA

08 Martin Ras ZS2MR

13 Johan Swart ZS2PDS

# Spouse Birthbays

### October

24 Cathy Gerstle Wolf ZS2WG

### November

13 Johan Swart Anmar ZR2AS

17 Cheryl du Preez Arno ZS2ABT

## Anniversaries

## **October**

24 AI ZS2U Jo ZS2W Akers

### 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 at 8:30 in English read by Rory ZS2BL, transmitted through the Lady's Slipper Repeater on 145.700MHz.

PEARS Bulletins are transmitted on Monday evenings at 20H00 through the Lady's Slipper repeater 145.700MHz 88.5Hz Narrow, which is coupled to the Longmore Repeater 145.625 MHz 88.5Hz Narrow.

Dulletin Moster			
21-Oct	Chris	ZS2AAW	
28-Oct	Mike	ZS2MIC	
04-Nov	Donovan	ZS2DL	
11-Nov	Ashley	ZS2AG	
18-Nov	Paul	ZS2PS	
25-Nov	Vaughn	ZS2VR	
02-Dec	Rory	ZS2BL	
09-Dec	Kevern	ZR2BK	

Bullatin Doctor

# HAM RADIO OUTLET-SOUTH AFRICA cc

16-Dec Dave

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# Our 2024/2025 PEARS Committee

These committee members can be reached as a group by sending email to committee[at]peham.co.za

PORTFOLIO	NAME	CALLSIGN	EMAIL	CONTACT No
Chairman, Technical support & maintenance	Kevern Burger	ZR2BK	k.burger[at]stfrancislinks.com	O83 401 9587
Vice Chairman, SARL liaison, Hammies, Youth, Contest Scoring	Dave Higgs	ZS2DH	om[at]zs2dh.co.za	O82 387 5657
Treasurer	Michael Steenkamp	ZS2MIC	zs2mic[at]igen.co.za	O82 523 5677
Secretary, Repeaters, QSX emailing, club database	Christopher Scarr	ZS2AAW	christopher[at]peham.co.za	O82 925 6367
RAE Training	Donovan van Loggerenberg	ZS2DL	zs2dl[at]hamradio.co.za	O82 852 4885
Technical/repeaters, Search and Rescue & Emergency comms	Glen Cummings	ZS2GV	glenvanessa[at]gmail.com	O82 411 2743
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RAE Training	Vaughan Rizzo	ZS2VR	vaughan[at]netaddress.co.za	O82 882 6555

#### CO-OPTED POSTS

PORTFOLIO	NAME	CALLSIGN	EMAIL	CONTACT No
Contest Liaison Officer	Theunis Potgieter	ZS2EC	zs2ec01[at]gmail.com	O64 901 8079
Events & Rally organising	Tony Allen	ZR2TX	tony.zr2tx[at]gmail.com	O82 956 2920
Website renewal and updates	Graham Pearson	ZS2GKP	gpearson@[at]blsmedical.co.za	O82 321 4798

(Please note: The "@" sign has been replaced with "[at]" in the above addresses to try to prevent spamming)

# 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 tail	Add 88.5Hz for squ tail	events, hence no tall	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.