

G3ZME
G6ZME

News Letter

TDARS

TELFORD AND DISTRICT AMATEUR RADIO SOCIETY

www.TDARS.org.uk

FOUNDED 1969

www.TelfordHamfest.co.uk

Issue 315

Nov. 23—Jan. 2024

www.TDARS.org.uk

Programme

www.telfordhamfest.co.uk

- November 15 “Battery Pack Management” (BMS) by Tony M0TZM
- November 22 Winter Projects preparation evening. Ideas and outlines
- November 29 “My SOTA Tour of Europe 2023” - by Paul M0PLA
- December 2/3 (Sat/Sun.) Midland Microwave Round Table, Eaton Manor. Details Pg. 8**
- December 6 Committee meeting 8pm (Webex). 2m chat 144.600 MHz FM 8pm
- December 13 TDARS Christmas Meal at the Grazing Cow, Lawley (TBC)
- December 20 Mince Pie & Mulled Wine Social. Also club equipment Showtime !
- December 27 On-the-Air Christmas Net: 144.600MHz FM, from 8pm
- January 3 2024 Committee meeting 8pm (Webex). 2m chat 144.600 MHz FM 8pm
- January 10 Resurrecting an old PC with Linux — John M0JZH & Dave G0CER
- January 17 Winter Projects progress and construction evening
- January 24 Radio Related Linux — John M0XJA
- January 31 Bowls Evening with the LWWH Bowls Group. Refreshments provided
- February 7 Committee meeting 8pm (Webex). 2m chat 144.600 MHz FM 8pm
- February 14 Under-a-Fiver Construction Competition
- February 21 Surplus Equipment Sale (10% to club funds)

For Equipment Loans & Returns contact John M0XJA

For “RSGB Brickworks” scheme (Club or Individual) —enquiries to Graham G7LMF

For Morse Training and Morse Proficiency Tests Martyn G3UKV or Eric M0KZB.

Radio Amateur Exams- Latest: Contact Graham G7LMF training@tdars.org.uk

Qtc: News & Information



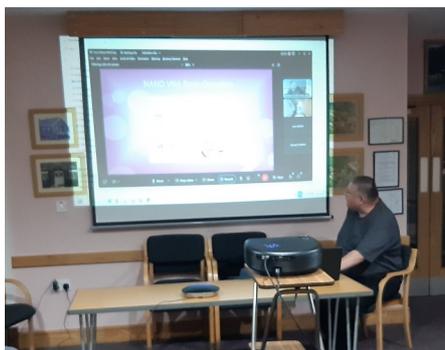
TDARS MEETINGS EVERY WEDNESDAY EVENING HELD NORMALLY AT LITTLE WENLOCK VILLAGE HALL WITH SOME ONLINE (Webex) STREAMING OF APPROPRIATE PRESENTATIONS: PLEASE CHECK FRONT PAGE LISTING FOR SPECIFIC DETAILS.

Please note: A current membership card may be required to borrow TDARS equipment. Please return borrowed equipment promptly .

As mentioned in the editorial (Pg. 2), several club members have given thought provoking Wednesday presentations to the membership at LWVH. Here's a few shots taken by Mike G6DFD in the audience.



John, G4IRN, WRTC



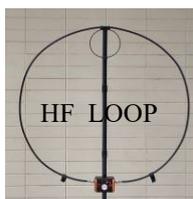
John M0XJA The NanoVNA



Paul M0PLA , The Rig Expert Antenna analyser

Big WELCOME to several new members who have recently joined TDARS: They include Scott M7WUK, Lilly 2E0WUK and John G6OZQ. We hope you enjoy the various events and talks we arrange. My apologies if I've missed anyone else. (Ed.)

Various Winter Projects have been offered, and will be discussed at the meeting of November 22nd. A basic HF Magnetic Loop has been suggested by Simon 'UFE and John 'JZH, together with a de luxe remotely tuned version. These are ideal for anyone with very limited antenna space for the HF bands, or possibly for portable operating. They are directional, and therefore can also help with certain local noise problems. Martyn 'UKV has been investigating basic commercial DIY kits From **Kanga**, these include a 'Little Roo' (40m RX in a tin box, ~£29) or beta version 'Rooster' (40m CW tcvr, price ~£35); and from **Walford** the 'Quantock' (80m DSB 5W tcvr, price ~£55). These are basic kits which don't match commercial rigs (Icom, Yaesu etc), but should be FUN to build and operate. More expensive and offering better performance are available from **QRP-labs.com**, such as the QCX, QDX and QMX tcvr models, offering CW or digi+ modes — single or 5 band variants, upto a kit price of about \$95. These are designed by Hans Summers (G0UPL) and made abroad, but are easily ordered and available in the UK. Best to check the range on his web site.



Several club members went to the well-organised RSGB Convention in Milton Keynes in October. There were 5 streams running over the weekend, with many of the lectures streamed live by a very complex recording studio. Members present included Dave G0CER, John M0XJA, John G4IRN, John G7ACD, David M0YDH, Paul G8AQA, Heather M0HMO, Martyn G3UKV, Ken G3YKI.



RSGB Convention. The Comms. Centre— where the video recording action took place.

Photos: G3UKV



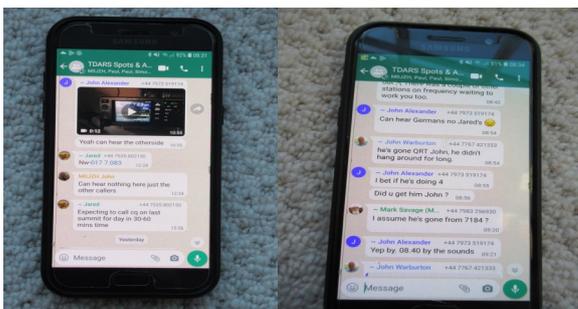
The 50 MHz Telford Trophy still in good shape in the 'no admittance' room at the RSGB Convention ! (shush...)



'Beta PCB of Kanga's new "Rooster" transceiver kit

GB3TF 70cm voice repeater has had a UPS (Un-interruptible Power Supply) fitted, since mini mains power cuts seem to be commonplace in Little Wenlock. Previously, even a few micro-seconds cut, knocked out the PC that controls the Yaesu Repeater equipment, and that required on-site re-booting of the software by John or Martyn. So far, reliability is now 100%. (fingers crossed.)

As many members are aware, Martyn 'UKV undertakes a specially licensed transmission every Thursday on 3605KHz at 9am local time, using the **call GB2CW**. The format is sending morse at 5, 8 and 12 words per minute plain text, with SSB read-back at each speed. This is followed by a couple of minutes of mixed numbers (0 to 9) at around 10 wpm. Finally, after about half an hour, Martyn invites reception reports. On Nov. 2nd, this was his **800th** GB2CW session (started in February 2007), and a few days later, he received this anonymous gift via the post. That was a huge surprise — gratefully received. . . Yum !



Quite a number of Members have joined the Club's Whatsapp media, set up some while ago by John M0JZH. It's intended to be a 'snaps and spots' site rather than a 'natter' channel. In practice, that means it's useful for members going out portable or mobile to activate SOTA, POTA, BOTA etc. sites or plain operating away from home. Also currently popular from home (or portable) stations for DX spotting on bands like 2, 6 or 10 metres.

REMINDER that there are various **TDARS nets**, notable on 80m (3657KHz) on Mondays & Fridays from about 08:45 clock time, as well as the long-established 2m FM Sunday net on 144.600 MHz +/- at 8pm local. All are welcome.

FURTHER REMINDER: This tent, and another similar sized tent in fairly good condition are available for purchase by a member. Just make a reasonable (ie cheap but acceptable) offer for club funds, ready for a sunny camp in 2024.



Thanks for Newsletter input this time:

**John M0XJA, Paul M0PLA, Mike G6DFD, Dave G0CER, Simon G0UFE
Mike G3JKX, Jared 2E0JFJ, John G4IRN, Paul G8AQA, Martyn G3UKV**

Next edition January-February 2024

Can YOU contribute something?— Results in a better Newsletter !

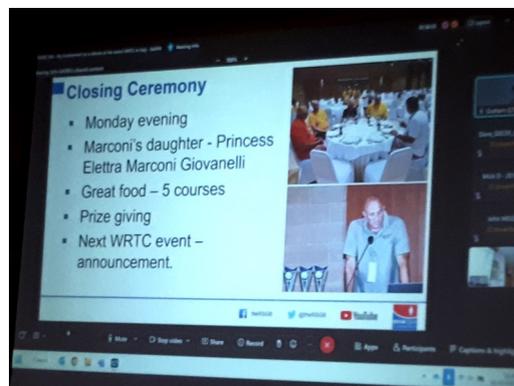
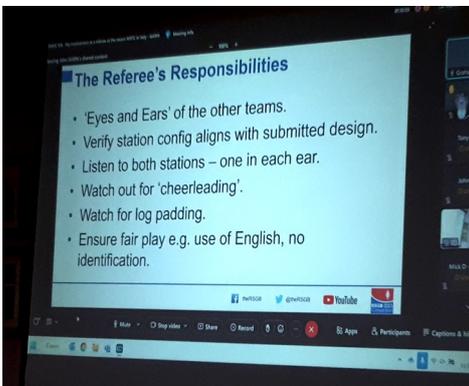
Happy to be top UK station and 2nd in my corner of the **IOTA contest** this year.
 Dave G0CER (as G0C) (Dave's email 7/9/23)

Section Single Operator												
Pos	Callsign	Location	Mode	Assistance	Time	Power	IOTA	Island	QSOs	Score	Mults	Tc
1	IT9IDR	NON-DXPEDITION	SSB	NON-ASSISTED	24-HOURS	LOW	EU-025	Sicily	352	2,935	81	237
2	G0C (G0CER)	NON-DXPEDITION	SSB	NON-ASSISTED	24-HOURS	LOW	EU-005	Great Britain	203	2,075	87	180
3	K4TMC	NON-DXPEDITION	SSB	NON-ASSISTED	24-HOURS	LOW	NA-112	Bogue Banks Aka Emerald	323	2,270	44	99
4	GM1X (GMOHBF)	NON-DXPEDITION	SSB	NON-ASSISTED	24-HOURS	LOW	EU-010	North Uist	136	1,475	57	84

Just a few days before the RSGB Convention (Oct.13-15), John G4IRN gave his Convention prepared talk to TDARS as a sort of trial run !

John was chosen as a WRTC (World Radiosport Team Championships) Referee in Italy in July, where 58 teams from all over the world competed in a major international HF Contest within the chosen country, using more-or-less identical station equipment. This is an event that takes place every 4 years in different countries, including Germany, Russia, Brazil, USA, Finland and Slovenia since it started in 1990. In 2026, it is planned to take place in the UK, and volunteer helpers are already being invited to sign up . . .

Here's a couple of John's slides; he was wearing his official Ref's tee-shirt for the occasion



The **Annual Christmas Dinner** takes place this year at the 'Grazing Cow' pub in Lawley, on Wednesday 13th December. This is an excellent, modern venue which offers great food at a moderate price. The menu and Booking Form is available from Simon 'UFE, and he asks for bookings and payment ASAP. All very welcome.



A few **club purchases** have been made in the past few weeks, including new batteries for the handheld VHF radios, and a Rig-Expert Antenna Analyser that covers all the HF bands, and VHF/UHF up to the 432MHz band. To offset the cost, one of the existing MFJ analysers will be sold off. TDARS equipment is available for loan to club members—all enquiries to John M0XJA, our TDARS Equipment Curator, or Simon G0UFE.



From Mike, G3JKX . . . A little bit of formulae education : : : :

$$f = 1 / 2\pi \sqrt{LC} \text{ is the resonant frequency}$$

The resonant frequency of an Inductance (L) and a Capacitance (C) in series or parallel is $f = 1 / 2\pi \sqrt{LC}$ Unfortunately the value of L has to be in Henries and C in Farads. These are quite difficult to use, because we home builders tend to use small inductors (μH) and small capacitors.(pF).

So someone in the USA did some maths and came up with a much simpler revision of the formula. (ARRL)

$$fsqd = 25,330.3 / L(\mu\text{H}) \times C(\text{pF})$$

As you can see, all the 'multiply by 10 times to the minus somethings' have now been eliminated. Simply multiply the values of L in μH x C in pF and divide this sum into 25,330.3.

But the formula states that f is squared, so take the square root to find the resonant frequency. (see note)

Try this. Say that you need the value of a capacitor to go with your $1\mu\text{H}$ coil to resonate on 7MHz.

The formula must now be manipulated to get C on its own on one side of the equals sign.

