

# T News Letter

# TDARS

G3ZME  
G6ZME

TELFORD AND DISTRICT AMATEUR RADIO SOCIETY

[www.TDARS.org.uk](http://www.TDARS.org.uk)

FOUNDED 1969

[www.TelfordHamfest.co.uk](http://www.TelfordHamfest.co.uk)

Issue 312

May– June 2023

[www.TDARS.org.uk](http://www.TDARS.org.uk)

## Programme

[www.telfordhamfest.co.uk](http://www.telfordhamfest.co.uk)

- May 24 MMANA-GAL antenna Modelling software. Callum M0MCX in person at LWVH and via Webex 8pm.
- May 31 Walking FoxHunt: The Fox Martin 'TRO. 7:30pm start at LWVH. 144.600 FM
- June 7 Committee meeting (Webex) + 2m net (144.600 MHz FM) 8pm.
- June 14 6 metre Trophy Contest preparation (Contest date 17/18 June)
- June 17-18 (w/end) 6m Trophy Contest from Long Mynd (IO82NN)**
- June 21 Remote station Operation—John Warburton G4IRN (+ Webex)
- June 28 Walking Foxhunt: 7:30pm start LWVH. 144.600MHz FM + VHF NFD prep.
- July 1-2 VHF Field Day from Long Mynd site, IO82NN. Arrive ~10am Saturday**
- July 5 Committee Meeting (Webex) + 2m net (144.6MHz FM at 8pm.)
- July 12 BBQ at LWVH Field from ~ 8pm. Bring your own beer (if required)
- July 19 Visit to Criggion Radio Station—thanks to Robert GW6GBY (SY5 9BA)
- July 26 Walking Foxhunt: (final) 7:30pm start LWVH. 144.600MHz FM
- August 2 Committee meeting (Webex) + 2m net (144.600 MHz FM) 8pm.
- August 9 HamFest preparation: Please volunteer to Martin 2E0TRO

***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](mailto:training@tdars.org.uk)***



# Qtc: News & Information



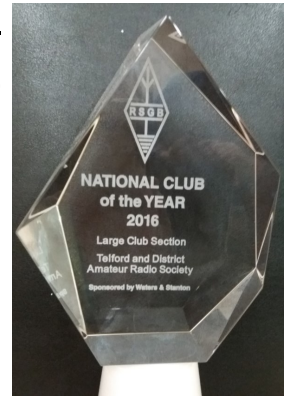
**TDARS MEETINGS EVERY WEDNESDAY EVENING HELD NORMALLY AT LITTLE WENLOCK VILLAGE HALL WITH SOME ONLINE (Webex) STREAMING OF APPROPRIATE PRESENTATIONS: PLEASE CHECK FRONT PAGE LISTING FOR SPECIFIC DETAILS.**

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

## **The 2023 TDARS Annual General Meeting took place at the end of March.**

The committee remained essentially unchanged, but the new Club Equipment curator is now John M0XJA, who has been familiarising himself on the wide range of equipment, aerials and books that can be borrowed for short periods. Also the additional committee members are now Tony M0TZM and Mike G6DFD, who have already participated in the May Committee meeting via Webex. There was discussion re contest participation, and Paul G8AQA put himself forward as a contest co-ordinator for the Society.

Simon gave his **Chairman's report**, highlighting a return (almost) to normal activities after Covid-19—highlighting the HamFest, JOTA, Christmas dinner, Marconi weekend and more. But he wanted to see more members coming to the Village Hall meetings as previously. To sum up: (quote) “The Club needs members — Members need the club ! “



The various **TDARS trophies** were awarded by Simon:-

**Syd Poole G3IMP:** (Operating in the best spirits of amateur radio) **John G4IRN**

**Jack Hassall:** (Services to TDARS over past year) **Jez M0JXW**

**Construction Project Competition:** **David M0YDH**

**Beginner's Project competition:** **Jared M7JFJ**

**Under-a-Fiver Construction competition:** **Martyn G3UKV**

**Direction Finding (DF) Competition 2022:** **Martyn G3UKV**



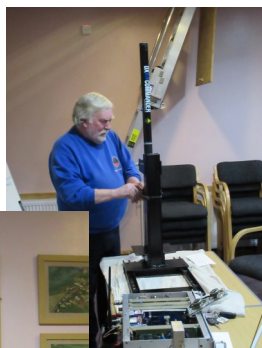
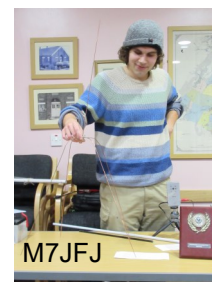
**Note:** David M0YDH also received 'honourable mention' at the RSGB's AGM for his digital ATV project which was his entry at our own construction competition in March. Congrats!



And Heather M0HMO also received a Diamond Brickworks Certificate from the RSGB, also presented by Simon at our AGM. Amazing !



**The annual Construction Competition** took place in March, and this year there was also a Beginner's Section entry from Jared M7JFJ, who brought along a 2 metre vertical antenna with radials he had made, and came away with that trophy. There were half a dozen entries, including a 2 metre 4 ele yagi (G4URT), an elaborate portable antenna stand (G0UFE), a 10 metre antenna (M0PNN), a Digital ATV TX (G3UKV), but the clear winner was David's (M0YDH) superb Digital ATV transceiver which was demonstrated to those present.



**Well done to all those entries. A really varied selection of kit.**



Following a public comment made at the AGM, which was considered to be unsuitable at such an occasion, the Committee of the Society (TDARS) has decided to adopt the Radio Society of Great Britain's (RSGB) "**Equality and Diversity**" policy, which runs to 2 pages:- [https://rsgb.services/public/publications/policy/RSGB\\_equality\\_and\\_diversity\\_policy.pdf](https://rsgb.services/public/publications/policy/RSGB_equality_and_diversity_policy.pdf) Here are two of the essential paragraphs that should guide all members and visitors of TDARS.

"**This policy** demonstrates our commitment to eliminating discrimination and encouraging and valuing diversity. We believe that a culture that embraces equality and values diversity will help us to ensure that everyone feels involved and included in our plans, programmes and activities. "

"**This policy** is intended to create an environment which respects and welcomes everyone, and in which no form of bullying, harassment, disrespectful or discriminatory behaviour is tolerated by anyone towards anyone. This particularly applies in relation to the 'protected characteristics' named in the Equality Act 2010: age, disability, gender reassignment, income, marriage or civil partnership status, pregnancy and maternity, race, religion or belief, sex and sexual orientation. "

The Club's **voice repeater GB3TF** (433.200MHz o/p) has finally settled down, and is fully operational. The feedback noises have ceased since the TX and RX filters (2 plus 3 respectively) were physically separated. We await the OfCOM feedback to John's (M0JZH) request to change frequency to allow for a much wider TX / RX frequency separation. However, don't hold your breath . . . .

Dave, **G0CER our RTTY enthusiast**, has received the results of the 2022 CQ WW RTTY Contest:- 4th in England, 29th in Europe. And 54th in the world—with 339,360 points. Great result and well done, Dave.



**Thanks for Newsletter input this time:**

**Peter G4URT, Dave G0CER, John G4IRN,  
Mike G6DFD, Graham G7LMF,**

**Next edition July / August 2023**

**Can YOU contribute something?— Results in a richer Newsletter !**

Simon (G0UFE) and John (M0JZH) were joined at a mini portable outing to The Bog area (Stiperstones) by a few visitors, including Mike G6DFD. Here are a couple of shots taken by Mike on this sunny day.



Sad news to hear that **Barry Olliver, G10OE of Wellington** passed away in mid April. Barry was a long-time past member of TDARS, although he had not renewed for quite a while. Comments on the reflector included 'He worked at Maplin on the bridge retail park for a few years until it closed....a great bloke and will be sadly missed' - G0UFE. 'Sad news, he used to join us for a beer at The Station' - G1MHU. '...keen sense of humour...many of us will remember Barry' - G3UKV.



**Peter GAURT** gave us all an insight into **Meteor Scatter** propagation at his presentation the week before the AGM. With antennas, such as that shown (left), and data modes, he has worked some great DX at VHF.



(Image from Google)

Satellite comms. have been with us since the late 1960's, using the prefix of OSCAR ('Orbiting Satellite Carrying Amateur Radio') but the launch of **Oscar-100** in November 2018 was something special, since it is the first geo-stationary that has carried amateur radio transponders—both narrow-band modes (SSB, CW, SSTV, data etc) and relatively wideband (digital TV) mode capabilities. The Qatari owned satellite is a commercial entity, but with some spare capacity that the German amateur fraternity have taken up; it has a lifetime expectancy of ~15 years, and covers almost half the world from its altitude of 35,800 Km. Most members of tdars will have visited the **Oscar-100 demo** at the last two HamFests, but it was great to have the lads put on a demo in April at LWVH. [G1OAR, G7ACD, G8VZT and M0PNN] Unfortunately, a live demo was not possible, despite the best efforts of the 'experts'. The main problem was a replacement laptop PC that wouldn't co-operate, and then the RAIN came down on the outside dish and equipment ! But there was lots to see and hear about indoors.



Problems...then rain !

Paul on his knees:



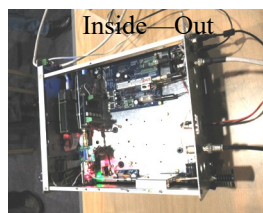
John, G7ACD shows us some antenna parts:



Pete G1OAR Dave G8VZT Paul M0PNN



Dave, 'VZT tells us more.



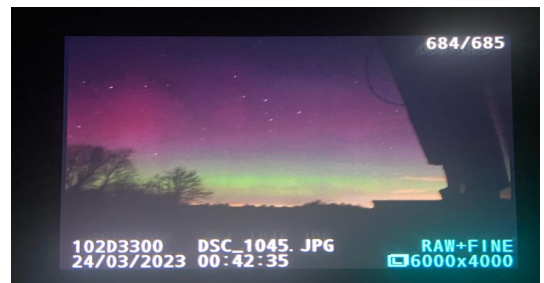
Inside—Out



Oscar receiver menu

**2.4GHz uplink,  
10.4 GHz downlink**

There have been several **auroras** stretching down to the UK this year, as solar cycle 25 progresses. Dave G0CER was up very early on Friday 24th March, and took this 25 second exposure on his camera at Tern Hill. Nice one.



### **A Skimmer Receiver — by John G4IRN**

I've recently implemented a 'Skimmer Receiver' at my remote station which can monitor and decode digital signals on up to 7 bands simultaneously. I have it configured to decode CW signals but equally it can decode RTTY, FT4, FT8 etc.

The SDR receiver is based on the very versatile [STEMlabs Red Pitaya 125-14](#) processor board - I managed to pick one up second hand a few years ago and have just got around to looking at it. I don't profess to really understand the inner workings of the Red Pitaya but instructions for configuring it as an SDR receiver or transceiver or vector analyser etc. are easily found online [here](#). The Operating System (Linux derivative) complete with necessary software can be downloaded and copied to the board's SD card. For running a Skimmer receiver the remaining software is on a Windows PC; the devices are connected together over Ethernet.

On the Windows PC I run [Skimmer Server](#) and [RBN Aggregator](#), the output from the latter is fed into the Reverse Beacon Network for all to see.

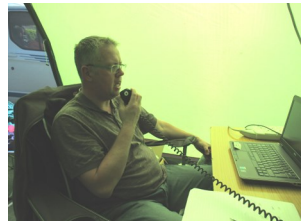
The signals being received, together with their frequency and relative strength can be seen here: [https://www.reversebeacon.net/main.php?rows=100&max\\_age=10,hours&spotter\\_call=g4irn&hide=distance\\_km](https://www.reversebeacon.net/main.php?rows=100&max_age=10,hours&spotter_call=g4irn&hide=distance_km)

73 John G4IRN



### **TDARS in Tywyn for the International Marconi Day — April 22.**

[ Ed Note: No written report received for the Newsletter, but Graham G7LMF and myself have provided the following photos: thanks Graham ]





It's up there ... somewhere ....



Just one gust of wind....SNAP....temp fix



Barry logging for GB100TMD



G7LMF and G0UFE on 40m



Really ???



This is the life . . . .



### Wiska Boxes for Antenna Construction — by Peter G4URT

During the March construction competition I entered a small 4 element portable 2m yagi that I knocked up from bits laying around, apart from the feeder box.

The feeder box was commented on both during the presentation and afterwards with people wanting to know more about the box which contained both the connections to the elements and the coax feed itself.

They are called Wiska boxes and are available in grey, black or white and in various sizes. Although more expensive than just your run of the mill plastic boxes they are waterproof to IP66 standard and have threaded holes along the sides to accommodate threaded waterproof glands. These glands are also available in various sizes depending on the thread size.

I have also used them on a previous 2m yagi design (from G4CQM) that used 1/2" tubing as the driven element. The gland was able to be tightened enough to support the driven elements thus solving the support issue.



For those who do not know about IP ratings, they are a series of standards which rate the ability of the box to resist solids and fluids ingress. The first number refers to solid ingress and the second number to fluid ingress. Therefore IP00 may well refer to the ability of a cardboard shoebox to resist any ingress! The highest rating is IP69 which is total protection from dust and steam-jet cleaning ingress. The Wiska boxes are rated at IP66 which means it is totally protected from dust (6) and from high pressure water jets (6). This could cause an issue with internal condensation as if water cannot get in then it'll have a problem getting out if condensation occurs!



I just use silica bags in my fixed installations and check them every year. I've had a Gweiss IP66 rated box at the top of my mast containing my VLNAs and coaxial relays for about 8 years now and never had a problem.

So, Wiska boxes are ideal for outside antenna use and I'm sure you could think of other uses for them. They are readily available from major electrical retailers like CEF who have an outlet in Telford. And of course for those who live out in the sticks like me, there is always Ebay.



Ducie Island – Ground Breaking Remote Operation DX-pedition to a Rare Entity

May 12, 2023

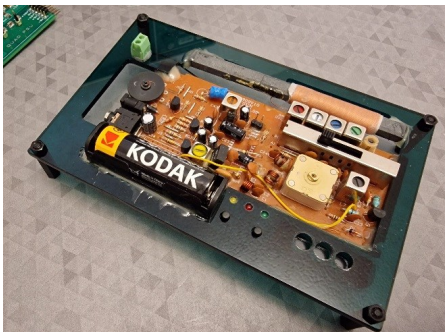
“VP6A will be on the air from Ducie Island (OC-182) from June 10 to June 24, 2023 (actual dates will be subject to WX). There will be five stations on the air on all bands from 160 to 6 metres, working CW, SSB and FT8.

Following the successful test of remote operations at FO/AA7JV, where over 11,000 remotely operated QSOs were made by five remote operators, VP6A will apply this concept to a full rare island DX-Pedition. A total of 14 operators based in North American, Europe and Asia will operate land based remote controlled stations around the clock. There will only be three local operators at Ducie: W6IZT, KN4EEI and AA7JV. This small team will set up and maintain the stations and operate locally from the nearby boat. They will visit the island once a day to refuel the generators and do any necessary maintenance. In line with the minimum foot-print concept, there will be no camping on the island.

This will be the first full DXpedition utilizing the RIB concept that features a large number of remote operators with a small footprint on a remote island. Four RIBs (Radio In a Box) will provide a total of 5 stations capable of 24/7 operation on 10 bands.

The RIBs feature complete stations capable of up to 1 kW in a weather-tight housing that allow remote operation. These RIBs were developed with support from Northern California DX Foundation. The goal is to enable a new, minimum impact operating mode for environmentally sensitive areas. RIBs also speed up the installation of stations. This will enable our small three-person team to build the five stations, including antennas, in a relatively short time. VP6A Team. “

*Sent in by John G4IRN*

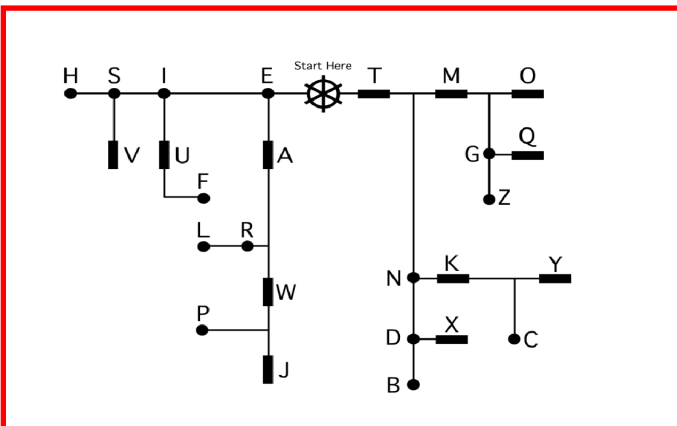


E-mail from Shabaz ( 27/03/2023)

Created this to be synonymous with a postmodern deconstructive art interpretation of the wireless kind! {Ed: ouch! } Joking aside : ) I took a cheap rubbish radio (Tecsun R-909) and glued it into a perspex frame, so that I have access to both sides of the circuit board. Handy for experimenting, to probe all the signals in the superset radio, with oscilloscope etc! Or to perhaps try modifications and so on.



Learning the Morse Code by 'mapping' — by Ceri Vincent



Starting from scratch, this is one way of learning Morse Code.  
START from top centre:

LEFT branch E I S H . . . . .  
RIGHT branch T M O \_ \_ \_ \_ \_

LEFT drop down A W J . \_ . \_ .  
RIGHT drop down N D B . . . . .

**And so on . . . . .**