

C.D.A.R.S.

April 2024

CHESHAM & DISTRICT AMATEUR RADIO SOCIETY MONTHLY NEWSLETTER

The Imperial Wireless Chain. (Part 2)

We meet the 2nd Wednesday each month at The Golden Eagle Pub in Ashley Green and every 4th Wednesday each month at the Ashley Green Memorial Hall, Ashley Green, HP5 3PP

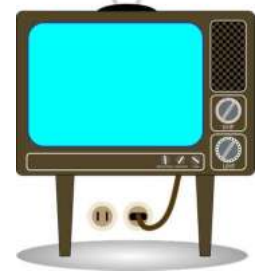
End Fed Half Wave Antenna Project.



Ideal for Backpack or Portable Use.

From The Archives

QRM.
A Modern Phenomenon?



Dates For Your Diary



Airfields on the Air during the Weekend of 6th/7th April 2024.

Organised by RAFARS

Contesting

Latest update of all the contest results.

For Sale & Wanted.

Lots of items up for sale. Grab yourself a bargain.

Want to write something for the newsletter?
Then you can contact me on cdarsnews@gmail.com

Can't find that elusive part or have anything for sale?
Why not drop me an email and put it in 'For sale and wanted'.

Morse links

If you're interested in Morse code, here are a few useful links:



FISTS CW Club

Promoting Morse Code for 36 years 1987-2023

<https://fists.co.uk>

WIKIHOW

How to learn Morse Code

<https://www.wikihow.com/Learn-Morse-Code>

The Ham Whisperer

Morse Code Course

<http://www.hamwhisperer.com/p/morse-code-course.html>

LEARN MORSE CODE

LEARN MORSE CODE in one minute !

<http://www.learnmorsecode.com/>

Welcome to LCWO.net

Learn Morse Code (CW) Online!

<https://lcwo.net/>



Tools for learning Morse Code

<https://www.aa9pw.com/morsecode/>



Celebrating the unique art form of Morse Code

<https://cwops.org/>



Morse Code by Ray Burlingame-Goff (SK - 29th July 2021)

<http://www.g4fon.net/>

Contents

April 2024

Regulars

Welcome	4
Chairmans Ramble	5
From The Archives	13
For Sale & Wanted	16
Dates For Your Diary	18
Radio Rallies	19

Contesting

Contest Round Up	6
Contest Dates	14

Features

The Imperial Wireless Chain Part 2 - <i>Connecting The Commonwealth.</i>	7
---	---

Other

Morse Training Links	2
----------------------	---

Projects

An End Fed Half Wave Antenna	10
------------------------------	----

Chairman - Dave Keston (G8FMC)
- Guy Plunkett (M0GUY)
- Roger Fellows (M7RMF)

Secretary - Malcolm Appleby (G3ZNU)
- John Hall (G0ODQ)

Treasurer - Matt Whitchurch (M1DTG)
- Peter Holliday (2E0PTH)

All the above are members of the committee and can be contacted on cdars-committee@googlegroups.com

Newsletter Editor - RogerFellows (M7RMF)

Welcome

Unfortunately we start this months newsletter on a sad note. On Tuesday 12th March our dear friend and club colleague Bryan M0IHY passed away. Bryan had been diagnosed with cancer in December 2023. Although the signs were not good Bryan remained positive throughout. Dave G8FMC includes a brief eulogy for Bryan in his Chairmans Ramble article. Below are condolence messages from club members.



Roger M7RMF

I knew Bryan & Angie from when they were on my Foundation course a few years ago. I am very sad to hear about Bryans death and hope Angie receives lots of support from the club - Terry Thirlwell G0VFW

Bryan was such a strong supporter of CDARS, he will be sorely missed - Malcolm Appleby G3ZNU.

Sorry to hear this sad news. My thoughts are with Angie - Phil Blakeney.

Very saddened to hear about Bryans passing. He was a lovely person and a credit to the radio community - Anthony M0UBT.

Very sad to hear the passing of Bryan, my condolences are with Angie and family - Bob G8MFH.

Very sad news that Bryan has passed away. Bryan was a huge asset to the club and will be sadly missed - Matt Whitchurch M1DTG.

Such sad news of Bryans passing. My thoughts sre with Angie - Mark Lane M7EFR.

Very sorry to hear about Bryan. My condolences to Angie and family at this sad time - Phil Rees M0NVS

Such sad news, he was a nice guy and dedicated radio tinkerer. My thoughts are with Angie at this tough time - James Stevens M0JCQ.

I'm really saddened to learn of Bryans passing. He was one of life's nice guys - Terry Baldwin G4UEM.

Very sad news. Bryan and Angie made several journeys to the Northampton Club and I was very pleased to meet them both - David Barlow G1MZD.

Very sorry to hear this news. I met Bryan several times. A great guy and a sad loss - John Cockrill G4CZB.



Bryan M0IHY receiving the Jeremy Browne G3XZG Tankard from Dave G8FMC.

Also in this months issue there is an end fed half wave antenna project ideal for backpack / portable use. The second part of 'The Imperial Wireless Chain', Britains connection with 'The Empire' plus contesting news and upcoming special events. Also dont forget to check out the 'For Sale' section. Lots of ex-club items up for grabs. Hope you enjoy this issue.

Roger M7RMF

Chairmans Ramble

The first thing to mention is the very sad & relatively sudden loss of Bryan Page MOIHY, who up until very recently did such sterling work producing this News Letter. Bryan had been diagnosed in early December 2023 with lung cancer & soon after with added complications. It became clear that a cure was unlikely, but his passing on Tuesday 12th March was a shock to us all & much sooner than could be predicted. It was only 6 days before, that I was able to visit him at home & present him with the Jeremy Browne Memorial Tankard. (Awarded by unanimous decision of the committee, for several years of the News Letter production) The first recipient of this new trophy, in memory of the much loved & respected Jeremy G3XZG, who chaired the club for many years. Another taken very suddenly & before his time by cancer, not so long ago.

The funeral is on Thursday 4th April at the new Hemel Hempstead Crematorium, where a number of members will be present.

Our thoughts are with Angie at this most traumatic time; a lovely lady who has more than her fair share of her own health problems to deal with, as well as the sudden loss of her husband, best friend & carer Bryan.

On a much cheerier note we congratulate James M0JCQ & Christina on the birth of a baby boy Felix, a little later than scheduled! How long before he joins James on some SOTA summits?



Dave (G8FMC)



The new committee has now met (virtually on Zoom) and we are working on activities for a little later in the year. May & the usual Brill Windmill event is not far away. Saturday 11th and Sunday 12th this year. We hope there are a good group of volunteers for at least one day of the weekend? Anyone who is available & would like to get involved, let Roger M7RMF, Malcolm G3ZNU or myself know.

It has come to light that there may be a few members and friends that have not 're-validated' their licence within the stipulated 5 year period. This has caused all sorts of agro and complications, with the 'paperwork' aimed at 'new licence applications' and completely inappropriate for a re-claim of an old licence! It seems that the on-line re-validation via the Ofcom portal should work as long as one has remembered ones log-in and password? Trying to create a new on-line account is likely to 'bounce'. It seems the only solution in that case is to phone them up. Try Tel. No. 0300 123 1000 or 020 7981 3131.

I believe one can re-validate at any time, therefore it may be appropriate to do it annually, maybe around ones birthday, or something similar? That would guarantee NOT going past the 5 year period? My licence expiry date was imminent on the 28th May this year. I have successfully done that on-line, where my log-in details worked OK (somewhat to my surprise!)

73 all, Dave K
G8FMC (Chairman & Contest Coordinator)

Contest Round Up.

Affiliated Societies (AFS) Superleague 2023/2024:

Well, the results for the final 70cm session on 4th February were finally published just after going to press last month!

We did not overhaul Grimsby, who managed to get 'runner-up' place behind the inevitable Camb-Hams. CDARS & friends got 3rd place. A very good result, the same position as last year. My thanks to all the contributors including the 'Associate Members' who help us in these contests.

The UKAC's 2024 (under the CDARS banner for 2024, including NRC & AVRS)

Our excellent start reported on last month has been maintained quite well. However Hereford have now just got back to 2nd place with CDARS in 3rd. This is as a result of their fairly modest SHF entry; but we have none at present on SHF.

An omission that I have just noted, is that congratulations are in order for Phil M0NV5, who braved horrible weather in January for the first 2m UKAC & went /P to his regular site near Brill. It paid off as when the results came out Phil had bagged 1st place in the AR (Restricted) category & got the coveted 1,000 pts. Great result Phil. That is a major reason why we were in 2nd place for the first few events.

VHF Championship 2024

The first event (144/432MHz on 2nd - 3rd March) saw a total of 10 entries on 2m (more than any other club/group!) & 9 entries on 70cm (matched by Harwell, who seem to be trying hard this year?) Tremendous support, thanks to all for your efforts.

At the moment Phil (M0N) looks like he should get the top spot on 2m in the SO section (only 5 entries in this category) & Matt G0XDI 2nd place on both 2m & 70cm in the SF category. 6S (where most of us entered) on 2m is looking like Charlie G0SKA should get 2nd with John G0ODQ in 4th?

On 70cm our best are; John G0ODQ in 3rd & Roger G3MEH in 4th. This bodes quite well for the AFS normalised scores outcome?

My 2m effort got me a big surprise of HB9NE (I hope I got the detail correct?) & I even featured on his list of top 10 DX; in the number 10 spot! (I am just a little farther North than most of you!) If confirmed, then I am potentially in 12th place out of 37, which is better than normal for a contest that is won or lost on EU contacts, which are generally difficult from here.

Be aware that although the Foundation Licence power limit is now 25W on most bands, the AL limit for contests is still 10W unless otherwise stated! What happens next year remains to be seen?

A reminder that anyone having a bash at the 80m CC's (CW, Data & SSB) should tag their logs to Northampton for 2024. A few more entries would be appreciated.

73, Dave K, G8FMC

The Imperial Wireless Chain (Part 2)

The Imperial Wireless Chain was a strategic international communications network of powerful long range radiotelegraphy stations, created by the British government to link the countries of the British Empire. The stations exchanged commercial and diplomatic text message traffic transmitted at high speed by Morse code using paper tape machines. Although the idea was conceived prior to World War I, the United Kingdom was the last of the world's great powers to implement an operational system. The first link in the chain, between Leaffield in Oxfordshire and Cairo, Egypt, eventually opened on 24th April 1922, with the final link, between Australia and Canada, opening on 16th June 1928. *(Longwave masts at Rugby's Hillmorton transmitting station - right)*



Initial scheme

Guglielmo Marconi invented the first practical radiotransmitters and receivers, and radio began to be used for practical ship-to-shore communication around 1900. His company, the Marconi Wireless Telegraph Company, dominated early radio. In the period leading up to World War I, long distance radiotelegraphy became a strategic defense technology, as it was realized that a nation without radio could be isolated by an enemy cutting its submarine telegraph cables, as indeed happened during the war. Starting around 1908, industrialized nations built global networks of powerful transoceanic wireless telegraphy stations to exchange Morse code telegram traffic with their overseas colonies. In 1910 the Colonial Office received a formal proposal from the Marconi Company to construct a series of wireless telegraphy stations to link the British Empire within three years. While not then accepted, the Marconi proposal created serious interest in the concept.

A dilemma faced by Britain throughout the negotiations to establish the chain was that Britain owned the largest network of submarine telegraph cables. The proposed stations would directly compete with cables for a fixed amount of transoceanic telegram traffic, reducing the revenue of the cable companies and possibly bankrupting them. Parliament ruled out the creation of a private monopoly to provide the service and concluded that no government department was in a position to do so, and the Treasury were reluctant to fund the creation of a new department. Contracting the construction to a commercial "wireless company" was the favoured option, and a contract was signed with Marconi's Wireless Telegraph Company in March 1912. The government then found itself facing severe criticism and appointed a select committee to examine the topic. After hearing evidence from the Admiralty, War Office, India Office, and representatives from South Africa, the committee unanimously concluded that a "chain of Imperial wireless stations" should be established as a matter of urgency. An expert committee also advised that Marconi were the only company with technology that was proven to operate reliably over the distances required (in excess of 2,000 miles (3,200 km)) "if rapid installation and immediate and trustworthy communication be desired".

After further negotiations prompted by Treasury pressure, a modified contract was ratified by Parliament on 8th August 1913, with 221 Members of Parliament voting in favour, 140 against. The course of these events was disrupted somewhat by the Marconi scandal, when it was alleged that highly placed members of the governing Liberal party had used their knowledge of the negotiations to indulge in insider trading in Marconi shares. The outbreak of World War I led to the suspension of the contract by the government.[8] Meanwhile Germany successfully constructed its own wireless chain before the war, at a cost equivalent to two million pounds sterling, and was able to use it to its advantage during the conflict.

continued

Post World War I

With the end of the war and the Dominions continuing to apply pressure on the government to provide an “Imperial wireless system”, the House of Commons agreed in 1919 that £170,000 should be spent constructing the first two radio stations in the chain, in Oxfordshire (at Leafield) and Egypt (in Cairo), to be completed in early 1920 – although the link actually opened on 24th April 1922, two months after the UK declared Egypt independent. Parliament’s decision came shortly after legal action initiated by Marconi in June 1919, claiming £7,182,000 in damages from the British government for breach of their July 1912 contract, and in which they were awarded £590,000 by the court. The government also commissioned the “Imperial Wireless Telegraphy Committee” chaired by Sir Henry Norman (the Norman Committee), which reported in 1920. The Norman Report recommended that transmitters should have a range of 2,000 miles, which required relay stations, and that Britain should be connected to Canada, Australia, South Africa, Egypt, India, East Africa, Singapore, and Hong Kong. However, the report was not acted upon. While British politicians procrastinated, Marconi constructed stations for other nations, linking North and South America, as well as China and Japan, in 1922. In January 1922 the British Chambers of Commerce added their voice to the demands for action, adopting a resolution urging the government to urgently resolve the matter, as did other organisations such as the Empire Press Union, which claimed that the Empire was suffering “incalculable loss” in its absence.

Under this pressure, after the 1922 General Election, the Conservative government commissioned the Empire Wireless Committee, chaired by Sir Robert Donald, to “consider and advise upon the policy to be adopted as regards an Imperial wireless service so as to protect and facilitate public interest.” Its report was presented to the Postmaster-General on 23rd February 1924. The committee’s recommendations were similar to those of the Norman Committee – that any stations in the United Kingdom used to communicate with the Empire should be in the hands of the state, that they should be operated by the Post Office, and that eight high-power longwave stations should be used, as well as land-lines. The scheme was estimated at £500,000. At the time the committee was unaware of Marconi’s 1923 experiments into shortwave radio transmissions, which offered a much cheaper alternative – although not a commercially proven one – to high-power long-wave transmission system.

Following the Donald Report and discussions with the Dominions, it was decided that the high-power Rugby longwave station (announced on 13th July 1922 by the previous government) would be completed since it used proven technology, in addition to which a number of shortwave “beam stations” would be built (so called because a directional antenna concentrated the radio transmission into a narrow directional beam). The beam stations would communicate with those Dominions that chose the new shortwave technology. Parliament finally approved an agreement between the Post Office and Marconi to build beam stations to communicate with Canada, South Africa, India and Australia, on 1st August 1924.

Commercial impact

From when the Post Office began operating the “Post Office Beam” services, through to March, 31st, 1929, they had earned gross receipts of £813,100 at a cost of £538,850, leaving a net surplus of £274,250. Even before the final link became operational between Australia and Canada, it was apparent that the commercial success of the Wireless Chain was threatening the viability of the cable telegraphy companies.

An “Imperial Wireless and Cable Conference” was therefore held in London in January 1928, with delegates from the United Kingdom, the self-governing Dominions, India, the Crown Colonies and Protectorates, to “examine the situation which arose as a result of the competition of the Imperial Beam Wireless Services with the cable services of various parts of the empire, to report upon it and to make recommendations with a view to a common policy being adopted by the various governments concerned. It concluded that the cable companies would not be able to compete in an unrestricted market, but that the cable links remained of both commercial and strategic value. It therefore recommended that the cable and wireless interests of the Eastern Telegraph Company, the Eastern Extension, Australasia and China Telegraph Company, Western Telegraph Company and Marconi’s Wireless Telegraph Company should be merged to form a single organisation holding a monopolistic position. The merged company would be overseen by an Imperial Advisory Committee, would purchase the government-owned cables in the Pacific, West Indies and Atlantic, and would also be given a lease on the beam stations for a period of 25 years, for the sum of £250,000 per year.

continued

The conference's recommendations were incorporated into the Imperial Telegraphs Act 1929, leading to the creation of two new companies on 8th April 1929; an operating company Imperial and International Communications, in turn owned by a holding company named Cable & Wireless Limited. In 1934 Imperial and International Communications was renamed as Cable & Wireless Limited, with Cable and Wireless Limited being renamed as Cable and Wireless (Holding) Limited. From the beginning of April 1928 the beam services were operated by the Post Office as agent for Imperial and International Communications Limited.

Transfers of ownership

The 1930s saw the arrival of the Great Depression, as well as competition from the International Telephone and Telegraph Corporation and affordable airmail. Due to such factors Cable and Wireless were never able to earn the revenue which had been forecast, resulting in low dividends and an inability to reduce the rates charged to customers as much as had been expected. To ease the financial pressure, the British Government finally decided to transfer the beam stations to Cable and Wireless, in exchange for 2,600,000 of the 30,000,000 shares in the company, under the provisions of the Imperial Telegraphs Act 1938. The ownership of the beam stations was reversed in 1947, when the Labour Government nationalised Cable and Wireless, integrating its UK assets with those of the Post Office. By this stage, however, three of the original stations had been closed, after the service was centralised during 1939–1940 at Dorchester and Somerton. The longwave Rugby radio station continued to remain under Post Office ownership throughout.

Beam stations

The picture (right) shows a much smaller, more recent shortwave “curtain antenna” (unconnected with the Imperial Wireless Chain) to illustrate the principle.

The shortwave Imperial Wireless Chain “beam stations” operated in pairs; one transmitting and one receiving. Pairs of stations were sited at (*transmitters given first*):

Tetney and Winthorpe (with Ballan and Rockbank in Australia, and with Khadki and Daund in India),

Ongar and Brentwood,

Dorchester and Somerton,

Bodmin and Bridgwater – the latter actually in the hamlet of Huntworth which is nearer to North Petherton (with Drummondville and Yamachiche in Canada, and with Kliphevel (now Klipheuwel) and Milnerton in South Africa)



Devizes was home to a receiving station until the outbreak of World War I

At Bodmin and Bridgwater, each aerial stretched to nearly half a mile (800 m) long, and consisted of a row of five 277 feet (84 m) high lattice masts, erected in a line at 640 feet (200 m) intervals and at right angles to the overseas receiving station. These were topped by cross-arm measuring 10 feet (3.0 m) high by 90 feet (27 m) wide, from which the vertical wires of the aerial were hung, forming a “curtain antenna”. At Tetney the antenna for India was similar to those at Bodmin and Bridgwater, while the Australian aerial was carried on three 275 feet (84 m) high masts.

Electronic components for the system were built at Marconi's New Street wireless factory in Chelmsford.

Source: Wikipedia.

Photo's Courtesy of: G-Man at English Wikipedia - RugbyAntenna Farm.

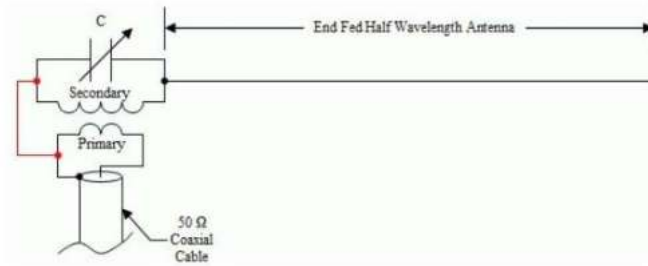
Peter Knorr - Own work, - Beam Antenna.

An End Feed Half Wave Antenna

About a year ago I was looking for an antenna for 10m which was easy and quick to erect. Ideally it should be suitable for portable or backpack use. After looking at a few designs I settled on the G0KYA end-fed half-wave from the book "Portable Antennas for Everyone". Variants of this design have been published in other books and on the web.

See: <https://g0kya.blogspot.com/2010/11/efhw-monoband-end-fed-half-wave-for-10m.html>
http://www.infotechcomms.co.uk/downloads/Endfed_halfwave_dipoles.pdf

The design is a tuned 1:7 UNUN with a half-wave length of vertical wire, see the circuit diagram below.



The design in the book uses a short length of coax as the tuning capacitor. Coax such as RG58 can withstand high voltages and has a capacitance of about 1pF per cm. I built the UNUN as per the book but after trimming several lengths of coax trying to get it to tune properly I decided to substitute a preset capacitor for the coax. I have a number of beehive capacitors salvaged from old valve equipment, they are rated for 500V. They are adjusted by screwing the two parts together, this increases the meshed surface area and hence increases their capacitance.



To calculate the voltage across the capacitor, start by calculating the voltage across a 50ohm load connected to the transceiver. Then multiply by 7 which is the turns ratio of the transformer.

The voltage across a 50 ohm load is:

$$V = v(W * R)$$

The table (right) shows the voltage across the capacitor for various power levels. Applying a bit of caution I would not want to use more than 50W.

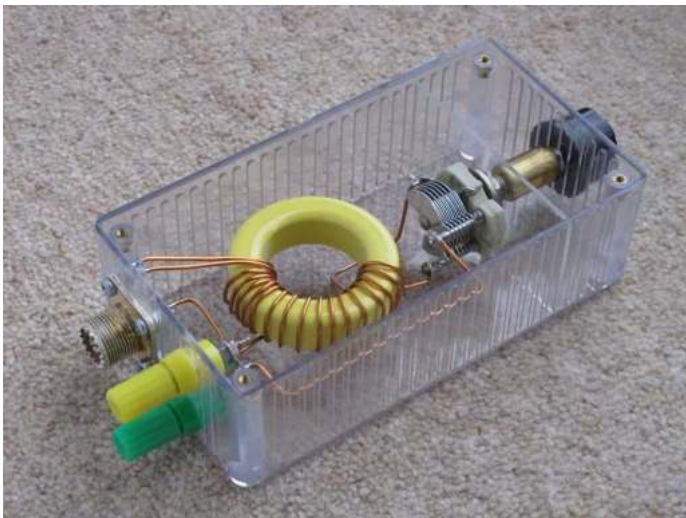
Power	Voltage across 50Ω load	Voltage across capacitor
5	15.8	111
10	22.4	157
25	35.4	247
50	50.0	350
100	70.7	495

A couple of images of my completed UNUN are shown below.



Its necessary to keep the ends of the antenna away from the telescopic mast and any other objects. I put a long length of cord on the top end of the antenna wire and moved the bottom end away from the mast by at least 1m to form a slightly sloping antenna.

Having used the antenna and UNUN to make contact with IT9FIQ in Sicily using only 5W I started thinking how I could modify the setup for other bands. At the moment I'm only interested in the 20m, 17m and 10m bands. I'm happy to use a different length of wire for each band but I wanted to avoid making an UNUN for each band. I used MMANA-GAL to calculate the impedance of a vertical EFHW for each band, the values were similar. I decided to create a Mk II UNUN substituting a Jackson C804 variable capacitor for the beehive capacitor, I ended up with the UNUN shown below.



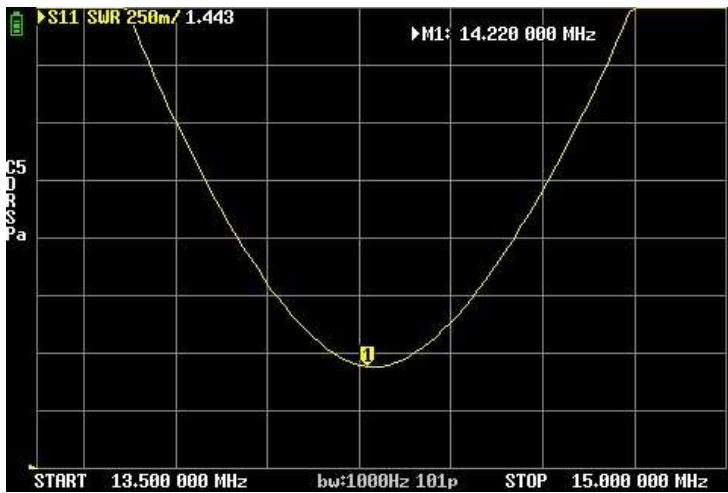
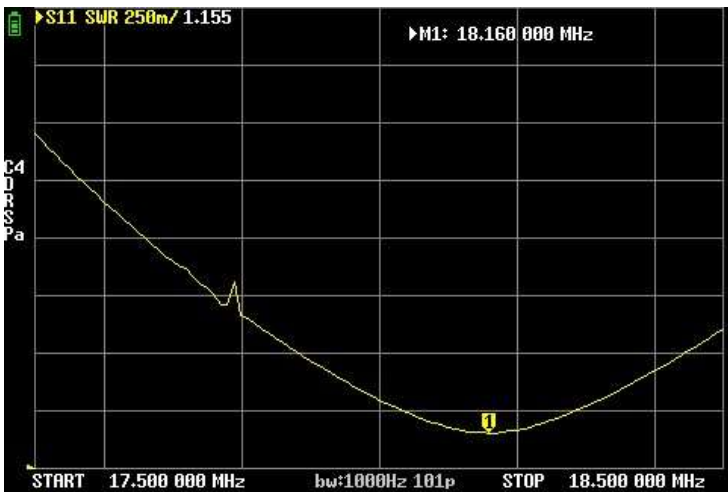
The Mk I UNUN used a T200-2 (red) toroid as per the instructions in the book. On the data sheet the optimum resonant circuit range is stated as 250 kHz - 10 MHz which is lower than the 14 MHz - 28 MHz range I'm interested in. The Mk II UNUN uses a T200-6 (yellow) which has a range of 3 MHz - 40 MHz. The toroid is held in place by the 18 SWG wire. The 3.8-50pF capacitor has an air gap of 0.015" and the manufacturers test them to 750V. This allows 100W of power with a good safety margin.

The VSWR for each band is shown below.



10m Band
SWR 1.435 @ 28.425MHz

17m Band
SWR 1.155 @ 18.160MHz



20m Band
SWR 1.411 @ 14.220MHz

I may be able to improve the VSWR figures by spending more time adjusting the length of the antenna wire.

From The Archives.

I see there is a letter in the latest edition of RadCom (April 2024) about man made noise. Several club members have recently been plagued by switched mode power supplies radiating RF noise or phone lines radiating the ADSL signal that they carry. The perception is the QRM is relatively recent but have a look at these two letters taken from the March and June copies of Practical Wireless 1959.

Interference from TV Receivers

SIR.—Now that every "Idiots' Delight" television set which is installed completely spoils radio reception in its vicinity, and with the G.P.O. receiving £4 licence fee for a television as against £1 a year for a radio, it is my personal opinion that everything is being done to force radio listeners to turn to television.

It is the duty of the G.P.O. to check interference with reception, but what happens when a television set next door blots out a neighbour's radio? One unfriendly call from an engineer and then silence in the majority of cases. The G.P.O. doesn't care: the offending neighbour (who may or may not have a licence at the time) doesn't care. I have just had my radio reception completely destroyed by a piercing TV whistle from a set placed to back up to mine through the wall, but I seem to be the offender by daring to complain! It is the old story of the strongest getting their own way, with the makers of TV sets having bludgeoned the authorities into allowing low standards of construction, with widespread radio interference.—F. J. LORR (Stamford).

Interference from TV Receivers

SIR.—Mr. A. Deverell (Rickmansworth), in the May issue, referring to my letter about the present country-wide TV interference with radios, draws my attention to the Wireless Telegraph Act, which I know very well indeed. But what the Act says should be done is one thing, and what the G.P.O. will do in cases of interference from TV sets is another. The engineer who visited me never made the slightest attempt to deal with the offending TV set. He called in my absence and suggested another outdoor aerial to replace my existing aerial and vanished. I complained again and he came back, again during my absence, rigged up a long aerial, moved my radio across the room to a most ridiculous position on the sideboard, ran earth wires upstairs to the bathroom taps, cut down the volume of the set three quarters (naturally also reducing the whistle) and said nothing more could be done. I then wrote to the G.P.O. Radio Department in London and finally, after I had been without a radio for *three months*, a device was brought along (which I had to pay for) which reduced the whistle and made the set usable, although still with a background whistle. In all these cases *nothing* is done to deal with the offending TV set. The radio owner has all the inconvenience, annoyance and expense. As regards Mr. Deverell's assertion that TV manufacturers "conduct exhaustive tests before marketing their receivers" it is well known that their standards are low. It is admitted by the G.P.O. that had their interference standards been adhered to, none of this interference from TV sets would have come about, but the manufacturers insisted on the present low standards, the G.P.O. gave way and radio listeners everywhere suffer.—F. J. LORR (Stamford).

The TV's of that time were 405 lines and the whistle would almost certainly be coming from the Line Output stage which was responsible for generating the scanning current for the horizontal deflection coils as well as generating the EHT voltage for the screen. The circuit would have been running at 10.125Kc/s with a gentle ramp up over 80uS and a rapid collapse over 18uS – plenty of scope for sharp pulse edges and harmonics.

At that time TV sets were built for AC/DC mains, this meant the chassis was connected directly to the mains which probably helped with radiating RF noise. If you were lucky the chassis was connected to mains neutral, if you were unlucky the chassis was connected to mains live.

In those days the G.P.O. had engineers who would make house calls to tackle interference. The G.P.O.'s role in investigating interference has been taken over by Ofcom and I very much doubt if they would send out one of their "Spectrum Engineering Officers" to investigate these days.

Peter 2E0PTH

Acknowledgement:

1. David Gleason and his team for scanning historical magazines – the source of these news cuttings.
2. Don Field, editor of *Practical Wireless*, for giving permission to reproduce the cuttings in our newsletter.

April - HF

Day	Date (2024)	Time (UTC)	Contest Name
Sat-Sun	06-07 Apr	1200-1200	FT4 International Activity Day
Mon	08 Apr	1900-2030	80m CC CW
Wed	17 Apr	1900-2030	80m CC SSB
Thu	25 Apr	1900-2030	80m CC DATA
Sat-Sun	27-28 Apr	1200-1200	UKEI DX CW Contest
Mon	29 Apr	1900-2030	RSGB FT4 Contest

April - VHF

Day	Date (2024)	Time (UTC)	Contest Name
Tue	02 Apr	1800-1855	144MHz FMAC
Tue	02 Apr	1900-2130	144MHz UKAC
Wed	03 Apr	1700-2100	144MHz FT8 AC (4 hours)
Wed	03 Apr	1900-2100	144MHz FT8 AC (2 hours)
Tue	09 Apr	1800-1855	432MHz FMAC
Tue	09 Apr	1900-2130	432MHz UKAC
Wed	10 Apr	1700-2100	432MHz FT8 AC (4 hours)
Wed	10 Apr	1900-2100	432MHz FT8 AC (2 hours)
Thu	11 Apr	1900-2130	50MHz UKAC
Tue	16 Apr	1900-2130	1.3GHz UKAC
Thu	18 Apr	1900-2130	70MHz UKAC
Tue	23 Apr	1830-2130	SHF UKAC
Sat-Sun	27-28 Apr	1400-1400	MGM Contest

May - HF

Day	Date (2024)	Time (UTC)	Contest Name
Mon	13 May	1900-2030	80m CC SSB
Mon	20 May	1900-2030	RSGB FT4 Contest
Wed	22 May	1900-2030	80m CC DATA
Thu	30 May	1900-2030	80m CC CW

May - VHF

Day	Date (2024)	Time (UTC)	Contest Name
Wed	01 May	1700-2100	144MHz FT8 AC (4 hours)
Wed	01 May	1900-2100	144MHz FT8 AC (2 hours)
Sat	04 May	1400-2000	432MHz Trophy Contest
Sat-Sun	04-05 May	1400-1400	May 432MHz-245GHz Contest
Sun	05 May	800-1400	10GHz Trophy Contest
Tue	07 May	1800-1855	144MHz FMAC
Tue	07 May	1900-2130	144MHz UKAC
Wed	08 May	1700-2100	432MHz FT8 AC (4 hours)
Wed	08 May	1900-2100	432MHz FT8 AC (2 hours)
Thu	09 May	1900-2130	50MHz UKAC
Sun	12 May	900-1200	70MHz Contest CW
Tue	14 May	1800-1855	432MHz FMAC
Tue	14 May	1900-2130	432MHz UKAC
Thu	16 May	1900-2130	70MHz UKAC
Sat-Sun	18-19 May	1400-1400	144MHz May Contest
Sun	19 May	1100-1500	1st 144MHz Backpackers
Tue	21 May	1900-2130	1.3GHz UKAC
Tue	28 May	1830-2130	SHF UKAC

2024 Club (Team) Contests

Note: Contests in Bold are Sat or Sat-Sun Contests

<u>Date</u>	<u>Time UTC</u>	<u>Contest Name</u>	<u>Sections</u>	<u>Ch'ship</u>
8 Apr	2000-2130	80m CC CW	100W-A, 10W-A, 100W-U, 10W-U	NRC
17 Apr	2000-2130	80m CC SSB	100W, 10W	NRC
25 Apr	2000-2130	80m CC Data	100W-A, 10W-A, 100W-U, 10W-U	NRC
4 May	1400-2200	432MHz Trophy	O, SF	CDARS
4-5 May	1400-1400	432MHz ,, 245GHz	O, SF	
5 May	800-1400	10GHz Trophy	O, SF	CDARS
12 May	900-1200	70MHz CW	AO, AR & AL	
13 May	1900-2030	80m CC SSB	100W, 10W	NRC
18-19 May	1400-1400	144MHz May	O, 6O, SF, SO & 6S (6hr option)	CDARS
19 May	1100-1500	1st 144MHz B-packers	5B, 25H	Solo
22 May	1900-2030	80m CC Data	100W-A, 10W-A, 100W-U, 10W-U	NRC
30 May	1900-2030	80m CC CW	100W-A, 10W-A, 100W-U, 10W-U	NRC
9 June	900-1300	2nd 144MHz Bpackers	5B, 25H	Solo
10 Jun	1900-2030	80m CC Data	100W-A, 10W-A, 100W-U, 10W-U	NRC
15-16 Jun	1400-1400	50MHz Trophy	O, 6O, SF, SO & 6S (6hr option)	CDARS
19 Jun	1900-2030	80m CC CW	100W-A, 10W-A, 100W-U, 10W-U	NRC
23 Jun	900-1200	50MHz CW	AO, AR & AL	
27 Jun	1900-2030	80m CC SSB	100W, 10W	NRC
1 Jul	1900-2030	80m CC CW	100W-A, 10W-A, 100W-U, 10W-U	NRC
6-7 Jul	1400-1400	VHF NFD	O, R, L, M, MS, FSO & FSR	
7 Jul	1100-1500	3rd 144MHz B-packers	5B, 25H	Solo

For sale and wanted

If anyone has anything for sale, or looking for that elusive item, then this is the place to post. Photo's and descriptions will help, email me at cdarsnews@gmail.com

Listed below are items that the club no longer has a use for. All items are offered to club members prior to being listed on eBay and/or Ham Radio Deals.

			Notes	eBay range	Member Price
Rigs	Icom IC-48E transceiver	70cm FM	Less mic	None listed	£20.00
Antenna accessories	Heathkit SWR meter S.E.M. QRM eliminator	HF		Radioworld £60	£10.00 £20.00
Test equipment	Haoxin HC-F2700L multifunction counter Amtron UK552 counter Hantek 1008C 8 channel oscilloscope	Upto 2.7GHz ? Up to 600MHz? For interfacing to PC		Similar £90 None listed	Offers Offers
Ex-G3XZG	Sommerkamp FT690 BNOS 6m linear nominal 100w	6m all mode For use with FT690	No pictures No pictures	One on at £100	£40.00 £20.00



<<<< Icom IC-48E >>>>



<<<< Heathkit SWR Meter >>>>



<<S.E.M QRM Eliminator>>





<<<< Haoxin HC-F2700 >>>>
Multifunction Counter



<<<< Amtron UK552 >>>>
Counter



<<<< Hantec 1008C
8 Channel Oscilloscope

Antennas (All below open to offers)

144MHz Ringo Ranger - *Good Condition*

4m whip, PL259 termination - *Needs Mag Mount*

Mirfield Electronics ME270 2m/70cm colinear - *1.2m long*

? 4 ele 4m beam, with boom strengthener

HF doublet with ladder line feeder - *Needs ATU*

? 9 ele 2m Tonna beam - *Missing one element*

Diamond W735 80m / 40m loaded dipole - *As New*

G5RV with ladder line

Scanner / handie mag mounts, selection - *Dubious Quality*

Dates For Your Diary



Below are a number of dates for special event weekends that take place through the year. A chance to get some 'special' callsigns in the log.

Airfields on the Air - Organised by RAFARS - 6th/7th April 2024.
Details here: <https://www.rafars.org/rafaota/>

International Marconi Day (GB4IMD)- Organised by Cornish RAC - April 27th 2024

Mills on the Air - Organised by Denby Dale RS - 11th/12th May 2024.
(CDARS at Brill Windmill tbc)

Islands on the Air - Organised by IOTA Management & RSGB - 27th/28th July 2024.

Railways on the Air - Organised by Bishop Auckland RAC - 28th/29th September 2024.

Listed below are dates of RSGB, UK and International contests for 2024.

ARRL Digital DX Contest - 1st/2nd June 2024

Practical Wireless QRP Contest - 8th/9th June 2024

UK Six Metre Group Summer Contest - 1st/2nd June 2024.

VHF NFD - 6th/7th July 2024. (CDARS at Wiggington tbc)

SSB NFD - 7th/8th September (CDARS at Wiggington tbc).

CQWW RTTY Contest - 26th/29th September 2024

CQWW DX SSB Contest - 26th/27th October 2024.

CQWW DX CW Contest - 23th/24th November 2024.

ARRL 10m DX Contest - 14th/15th December 2024

Please double check dates, start/end times etc in good time prior to the event.

Radio Rally Dates.

Full details of the events are available at: g4gra.org.uk/All.html

April 2024

20th - Yeovil ARC 38th QRP Convention

21st - NARSA Exhibition (Blackpool)

21st - Cambridge Repeater Group Rally

May 2024

5th - Lough Erne ARC 40th Annual Radio Rally

19th - Dartmoor Spring Radio Rally

26th - Durham & District ARC Radio Rally



June 2024

9th - Mendips Rally, Somerset.

9th - Junction 28 Radio Rally, Alfreton, Derbys.

15th - Rochdale & DARS Summer Rally

16th - East Suffolk Wireless Reviva I / Ipswich Radio Rally

23rd - Newbury 35th Radio Rally.

July 2024

14th - McMichael Radio Rally, Reading.

21st - Finningly ARS Rally, Doncaster

28th - Wiltshire Radio Summer Rally, Kingston Langley.

(All information courtesy of g4gra.org.uk)