

DORSET AMATEUR RADIO

SOCIAL NETWORK

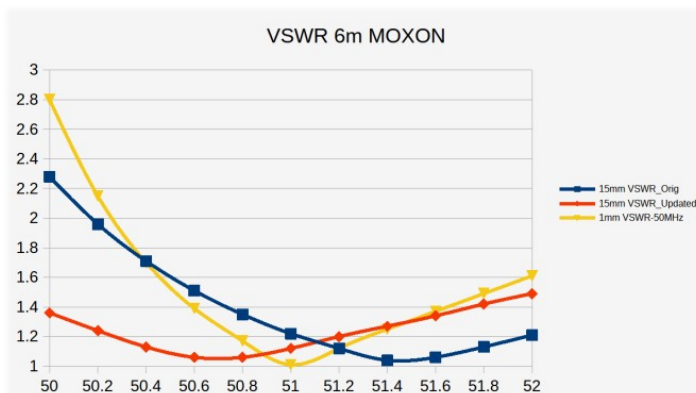
Technical Supplement

October 2026

<https://darsn.co.uk>

In this issue:

- POTA and 145 Alive News
- Camperham News
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- Honorary Members
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Lindsay - M9LIN
Secretary / Treasurer



Bill - M9WEG
Chairman



Tim - M9WWA
Editor

Events in October

The Countryman Inn
East Knighton
Dorchester
Dorset
DT2 8LL
3rd Oct.

POTA
Support your Parks Weekend
17th and 18th Oct.

See page 4 for more.

Nets

Mondays	No Darsn Net
Tuesdays	145.400 FM
Wednesdays	70.400 FM
Thursdays	Zoom Chat
Fridays	No Net
Saturdays	GB3OF
Sundays	144.375 USB

All details can be found on our Facebook page



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Dorset Amateur Radio Social Network

WINTER NET SCHEDULE
Nov 1st 2026 - 31st March 2027

MON	G3DAR keep in touch net 11am 2m FM 145.400 hosted by Bill M9WEG
TUES	G3DAR 2m FM vertical net 145.400 19.30 hosted by Peter G0PDF
WED	G3DAR 4m Net 70.400 19.30 hosted by Martin M7HQU
THURS	G3DAR Zoom Chat 19.00 details posted on Facebook hosted by Lins M9LIN
FRI	G3DAR keep in touch Net 11am 2m FM vertical 145.400 hosted by Bill M9WEG or Lins M9LIN
SAT	G3DAR 70cm REPEATER NET 430.9625 +7.600 71.9Hz 19.30 hosted by Reece M7DVX
SUN	G3DAR 2m SSB net USB 145.375 vertical 15.00 hosted by Martin M7HQU

All Welcome - Join Us On The Air!

Your Projects Wanted !

Have you got a project that you would like to share with us?

You can submit articles / projects for inclusion here by sending them to the Editor.

Submissions should be tested and be of your own work.

Anything is considered.

DARSN NETS!

Mondays	No Darsn Net
Tuesdays	145.400 FM
Wednesdays	70.400 FM
Thursdays	Zoom Chat
Fridays	No Net
Saturdays	GB3OF
Sundays	144.375 USB

No DARSN Net on a Monday BUT, you are all welcome to Join in the Monday Evening Net on 145.375MHz (FM) hosted by [Poole Radio Society](#).

Check out the [NETS](#) Page for more details on Nets in the area.

DARSN would like to thank all of our volunteers who give up their time and resources to run the Nets. You are very much appreciated.

DARSN News

Camperham events for 2027 have now been finalised.

Check out the [facebook](#) page, [official website](#) and [wavewizards.org](#).

There will be a presentation awarded to our honorary members at our event on the 3rd of October. We would appreciate your attendance.

We are pleased to announce that Ron Young, Mo Young and Peter (G0PDF) are being made Honorary members of the club for the support they have given to Amateur Radio over many years, and we are proud to have them as members.



Honorary Members Ron & Mo Young and Peter (G0PDF)

GB30F
Lulworth Dorset
DARSN Repeater

FREQUENCY 430.96250 +7.6 MHz	CONNECTED ON: EchoLink LINKING WORLDWIDE HAM RADIO
CTCSS TONE 71.9 Hz	SVXLink DIGITAL VOICE COMMUNICATIONS
NARROW DEVIATION YES	
LOCATION LULWORTH DORSET	

GB30F LULWORTH DORSET

430.96250 +7.6 MHz
CTCSS TONE 71.9 Hz
NARROW DEVIATION YES
DARSN REPEATER

LOCAL ACCESS TALK LOCALLY | **GLOBAL CONNECTIONS TALK GLOBALLY** | **ONE GATEWAY ONE COMMUNITY** | **HAM RADIO WITHOUT BORDERS**

CONNECT LOCALLY • TALK GLOBALLY • ONE FREQUENCY • ONE COMMUNITY



Please consider a donation for the upkeep of the repeater. It costs to keep the lights on. Any donation helps the Ham community.

You can scan the QR code (Left) with your mobile device or visit:

<https://pay.collectiv.com/gb30f-repeater-donations-74124>

October 2026 DX News

1 st Oct	31 st Oct	Juan Fernandez Is	XR0Z	LoTW	By CE3VTZ XQ7I fm Alexander Selkirk I (IOTA SA-101) for 10 days during October; 160-6m; CW SSB FT8; QSL via M0UXR
5 th Oct	25 th Oct	Somalia	6O2M	LoTW	By OG2M fm Garowe, Puntland; 40-10m; SSB CW; spare time operation
7 th Oct	17 th Oct	Iceland	TF	M0URX	By PD9DX as TF/PD9DX; HF; SSB FT8 FT4; QRV for Scandinavian Activity Contest, SSB
7 th Oct	21 st Oct	Solomon Is	H49A	LoTW	By 9A3MR 9A2NA 9A3CJY 9A4WY 9A7Y DK8ZZ fm Guadalcanal I (IOTA OC-047); HF + 6m; CW SSB FT8; QSL via DK8ZZ
8 th Oct	30 th Oct	Albania	ZA	LoTW	By AE5X as ZA/AE5X; 20-10m; CW; 10w; holiday style operation
10 th Oct	12 th Oct	Malta	9H	LoTW	By IK8YFU IU8GUK I8YGZ IU8HEP; 80-10m; CW SSB FT8 FT4; QSL via IK8YFU direct
16 th Oct	20 th Oct	Bangladesh	S21HRG	LoTW	By 13 ops fm Tetulia, Panchagarh; (NL46el); 80-10m; SSB FT8 CW; QSL via Club Log OQRS; QSL manager: S21RAK
16 th Oct	29 th Oct	Lesotho	7P8GE	LoTW	By DL7DF DK1BT DL4WK DL6SAK DL7BO DL7UFR; HF, incl 60m; OQRS: https://webufr.dl7ufr.selfhost.eu/7p8/oqrs.php
17 th Oct	20 th Oct	Bermuda	VP9	LoTW	By W9HT as W9HT/VP9; HF + 6m; CW SSB FT8; QSL via W9HT Direct
17 th Oct	31 st Oct	Sao Tome & Principe I	S9R	TBA	By EC7R D2ACE CT1BOL D2IM CT1BZG CT3MD; 160-6m, incl 60m; CW SSB + digital
17 th Oct	2 nd Nov	Ogasawara	JD1BQP	LoTW	By JP1IHD fm Chichijima I; 160-6m; 200, 100w; EFHW, hexbeam, 6m yagi
22 nd Oct	26 th Oct	Micronesia	V63SC	JM1LBO Direct	By JM1LBO fm Pohnpei I (IOTA OC-010); 80-2m; FT8 SSB
23 rd Oct	31 st Oct	Nepal	9N7XT	LoTW	By DL4XT fm Kathmandu; 160-10m; CW SSB FT8; 100-500w
26 th Oct	25 th Nov	Lesotho	7P9EA	HB9CCS	By HB9CCS fm Thaba-Tseka (KG0hl); HF; CW SSB
28 th Oct	6 th Nov	St Kitts & Nevis	V47JA	LoTW	By W5JON fm Calypso Bay; 160-6m; SSB FT8; yagi, verticals; QSL also OK via W5JON direct
28 th Oct	9 th Nov	Senegal	6W	LoTW	By IV3FSG I1FQH I1HJT I2PJA I2YSB IK2AQZ IK2CKR IK2HKT as 6W/I2YSB and 6W/IK2HKT; 160-6m; CW SSB RTTY FT8; QSL via I2YSB
30 th Oct	6 th Nov	Antigua	V26JJ	LoTW	By JA3FHL JA3PJL JH3UHG JJ2RCJ JA0JHQ; HF; CW SSB FT8; QSL via Club Log OQRS
30 th Oct	12 th Nov	American Samoa	KH8A	Club Log OQRS	By DJ9KH DK5WL DL1KWK DL2RNS DL4SVA DL6KAC DL6KVA DL7JOM DL7VEE fm IOTA OC-045 (AH45op); 160-6m; CW SSB FT8 RTTY; LoTW after 6 mos; see Web for full QSL details

Events Guide

We are planning lots of events for 2026. I will try to dedicate a full page every issue so you can see whats coming up!

Parks on the Air – Support your Parks Weekend - 17th and 18th October
Last event for 2026!

Winter - 3rd Full Weekend of January. January 16-17, 2027
Spring - 3rd Full Weekend of April. April 17-18, 2027
Summer - 3rd Full Weekend of July. July 17-18, 2027



145 Alive UPDATE- I'm very pleased to say that the last event has been a huge success in terms of activity during the event. 53 nets were operational during the time and to date we have received 46 completed Net Control logs. There are 7 logs which remain outstanding and many of those are due to technical logging difficulties or software problems on the day or after. I am hoping to get one or two of those in.

The logs contained 1865 2m QSO's and 1102 distinct unique Call signs were operational.

Next week we hope to be in a position to create a QSO Map for the event.

Mark and John

Countryman Inn

The Countryman Inn
East Knighton
Dorchester
Dorset
DT2 8LL

Wheelchair Accessible entrance
Guide Dogs, Service Dogs and Dogs
that are well behaved are also
welcome to pop in with their owners.
(Confirmed by Telephone)

We have a DARSN Meet-up at The Countryman Inn on the 3rd October 2026

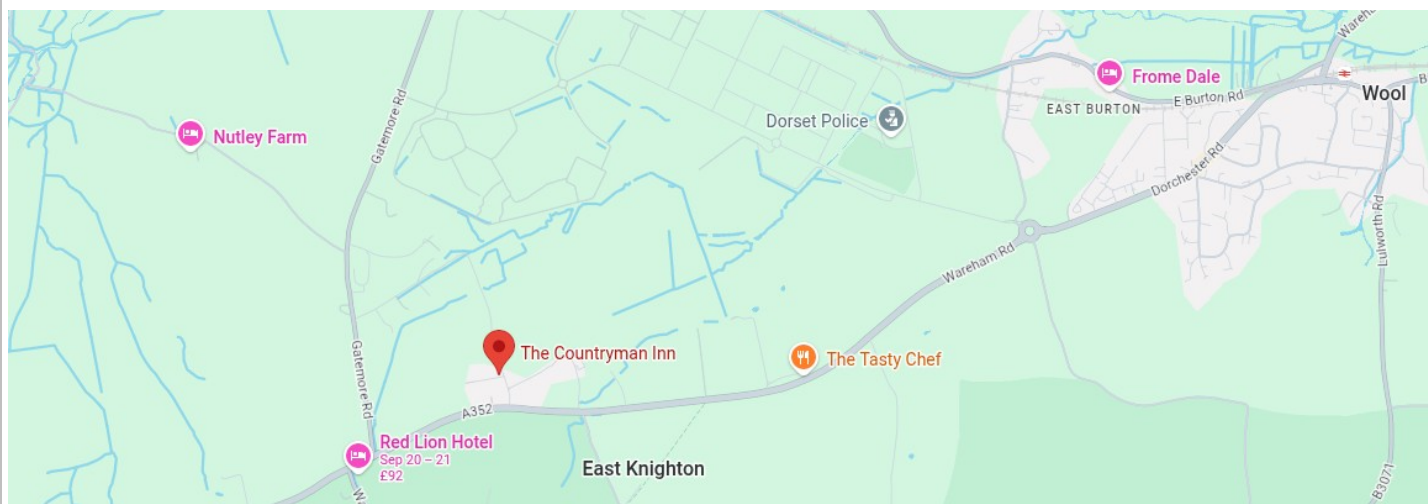
If you wish to dine with us, please take a look at the menu and let Lyndsay know your choice so we can Pre-Order, this will save the kitchen some time and will assist in the orders coming out promptly when we arrive at 12 (Midday)

Please let us have your orders AS SOON AS POSSIBLE.

Everyone is welcome, there is no requirement to be a DARSN member.

Many Thanks, Lyndsay.

Food Menus at : <https://www.countrymanpub.co.uk/food/>



Camperham – SixPenny Handley and Worlds End



We have had such a blast at the Camperham and Worlds End events.

A massive thanks to everyone who has attended our meet ups and events during 2026

We have the Sixpenny Handley (Camperham) event dates on the right and we look forward to seeing you there during 2027.

We are looking at returning to “The Royal Signals Museum” at Blandford in the near future as well as Haynes Motor Museum and The Tank Museum. Do you know of any locations that we may find of interest? If you do, please let us know. Contact Lyndsay (Email on first page)

Hi all, here are 5 dates booked for Camperham weekends at Church Farm - see events tab at the top of the page for full details 📅

CAMPERHAM WEEKENDS AT CHURCH FARM!

DATES FOR YOUR DIARY 📅

MAY 14th – 17th 2027
JUNE 18th – 21st 2027
JULY 16th – 19th 2027
AUG 27th – 31st 2027
SEP 10th – 13th 2027

Caravans, campervans and tents welcome – let me know if you can make it 🙋🏻

Day visitors are welcome but please consider a £5 donation to the club funds 🙏🏻

M9LIN

Just a gentle reminder that there is a 2m contest event coming up on the 6th October.
The RSGB FMAC contest runs from: 800-1855 (UTC).

These contests are intended to provide a place where stations who have FM equipment can come on and get a feel for contesting, and hopefully move-on over time to more conventional contesting on SSB. As such - we've tried to make the rules simple and equipment requirements simple and are open to non RSGB members.

Contest activity should only take place between 144.5125 MHz - 144.7875 MHz and 145.200 MHz - 145.400 MHz. There are gaps left here specifically to ensure that space remains on the bands for non-contest participants during these short events. Please take care to avoid interference to other established QSOs / data links etc. FM deviation should be set suitable for 12.5 kHz channel spacing.

Building a Moxon Antenna - Paul (G7EWY)

After admiring the dual band flowerpot antenna that Lindsay, M9LIN, had built at the recent DARSN Camperham I casually mentioned to her that her next challenge is to make a MOXON antenna!

What is a MOXON? It is a compact, two-element directional rectangular antenna. It has two elements, a driven element and a reflector and both have bent tips facing each other. It provides a great front-to-back ratio and a 50-ohm match without complex tuning stubs etc. The MOXON antenna was invented by Les Moxon, G6XN, and has about 30% less area than an equivalent 2-element yagi. Needing a suitable 4m and 6m to add to my portfolio I thought I should give it a go.

There are several online tools for calculating the dimensions but looking at the different tools I was getting a slight variation in lengths. On-line comment said some of the various tools may have forgotten about radian and degrees in their maths. Consequently I downloaded the following software tool:

<https://ac6la.com/moxgen1.html>

Using the software I calculated 4 different options, two on 6m and two on 4m using 15mm copper pipe and 1mm copper wire but I have only discussed the 6m versions here in detail. I centred the two bands at 51.0 MHz and 70.1 MHz respectively for mid-band tuning initially. The following is a screen shot of the 51MHz calculations for 15mm copper tube.

For the four designs I produced the following table with all dimensions in Meters. Meters were used as the modeling tool uses meters for dimensions.

Frequency/Wire	Dimension A	Dimension B	Dimension C	Dimension D	Dimension E
51 MHz/15mm	2.1098	0.2743	0.1036	0.406	0.7847
51 MHz/1mm	2.1382	0.3208	0.0601	0.3998	0.7807
70.1 MHz/15mm	1.5318	0.1939	0.0805	0.2965	0.5709
70.1 MHz/1mm	1.5537	0.2307	0.0463	0.2915	0.568.5
50.2 MHz/15mm	2.1436	0.2791	0.1049	0.4132	0.7972
70.05 MHz/15mm	1.5329	0.1941	0.0806	0.2967	0.5714

Building a Moxon Antenna - Paul (G7EWY)

Before making an antenna I had thought I would model each design to see if the diameter of the 'wire' makes any different to the tuning and bandwidth as theory says the larger the diameter of an antennas element the wider the bandwidth. Additionally I was interested to see what effects the ground has on the tuning of the antenna as these antennas are tuned for 50 Ohms matching and not for frequency.

I use MMANA-GASLbasic, version 3.5.3.82, for playing and understanding antenna designs (well worth having a play to understand how parameters and antenna location and ground type makes a difference to the radiated pattern).

The following is a screenshot of the antenna inputs for the baseline 51MHz 15mm copper tube antenna.

MMANA-GALbasic C:\Users\Mirag\Documents\Moxon\6m-15mm-cu.maa

File Edit Tools Setup Help MMANA-GALpro

Geometry View Calculate Far field plots

Name Freq MHz ☐ lambda

Wires 6 Auto segmentation: DM1 DM2 SC EC ☐ Keep connect.

No.	X1(m)	Y1(m)	Z1(m)	X2(m)	Y2(m)	Z2(m)	R(mm)	Seg.
1	1.0549	0.0	0.0	-1.0549	0.0	0.0	7.5	-1
2	1.0549	0.0	0.0	1.0549	-0.2743	0.0	7.5	-1
3	-1.0549	0.0	0.0	-1.0549	-0.2743	0.0	7.5	-1
4	1.0549	-0.7847	0.0	-1.0549	-0.7847	0.0	7.5	-1
5	1.0549	-0.7847	0.0	1.0549	-0.3779	0.0	7.5	-1
6	-1.0549	-0.7847	0.0	-1.0549	-0.3779	0.0	7.5	-1
next								

Sources 1

No.	PULSE	Volt. V	Phase dg
1	w1c	10.0	0.0
next			

Loads 0 (L - uH; C - pF; R/jX - Ohm) ☐ Use loads

No.	PULSE	Type	L/R/A0	C/jX/B0	Q/A1	F/B1
next						

Running the above model I achieved the following results:

Building a Moxon Antenna - Paul (G7EWY)

MMANA-GALbasic C:\Users\Mirag\Documents\Moxon\6m-15mm-cu.maa

File Edit Tools Setup Help MMANA-GALpro

Geometry View Calculate Far field plots

Freq 51 MHz

Ground

☐ Free space

☐ Perfect

☒ Real

Ground setup

Add height 7.40 m

Material Cu pipe

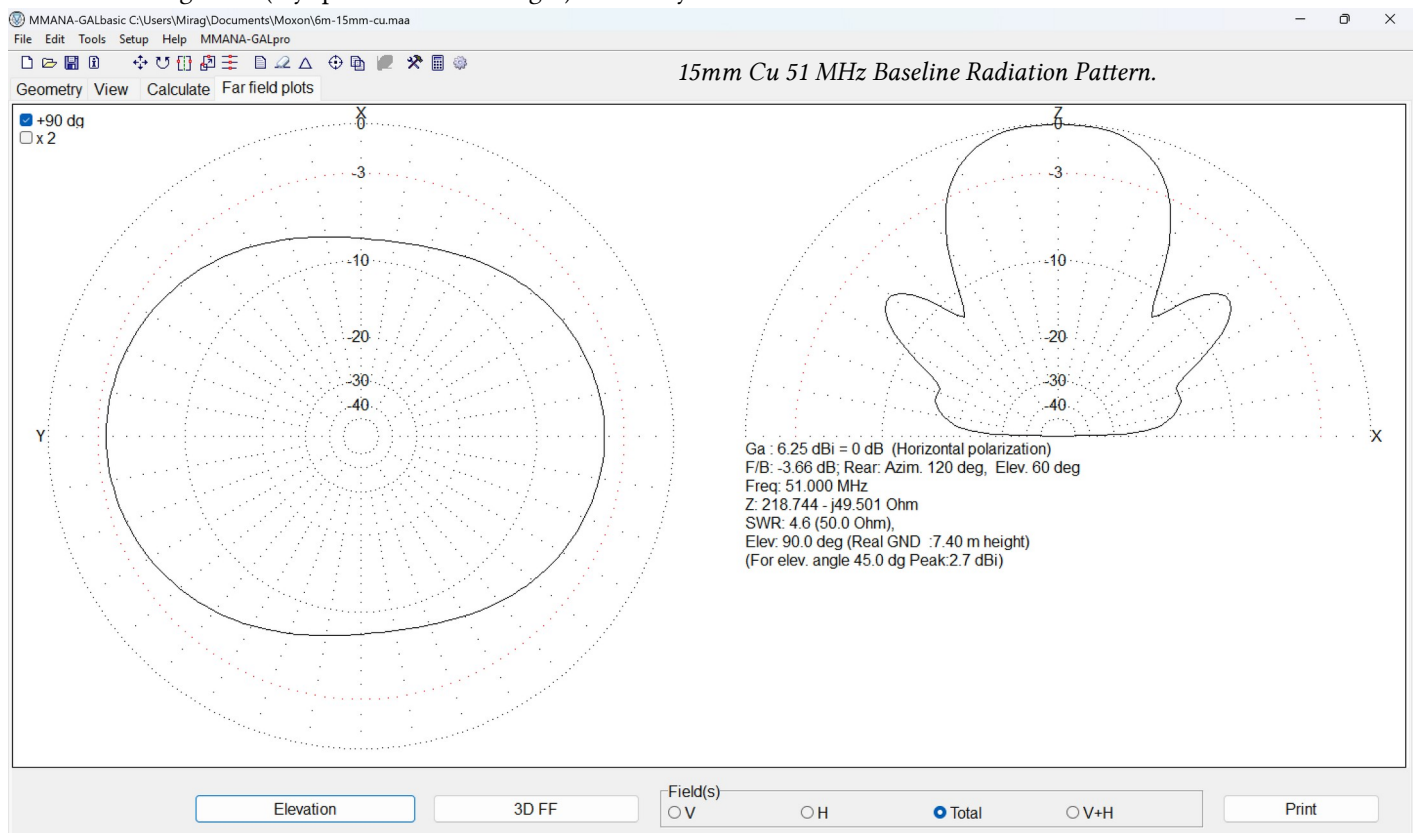
WAVE LENGTH = 5.878 (m)
 TOTAL PULSE = 102
 THE LOWEST POINT OF ANTENNA = 7.400 M
 FILL MATRIX...
 FACTOR MATRIX...
 PULSE U (V) I (mA) Z (Ohm) SWR PWR(WT)
 w1c 10.00+j0.000 215.7+j38.91 44.91-j8.103 1.22 2.1565
 POWER = 2.16 WT
 CURRENT DATA...
 FAR FIELD (Pin = 2.1565 WT)
 NO FATAL ERROR(S)
 0.44 sec

No.	F (MHz)	R (Ohm)	jX (Ohm)	SWR 50	Gh dBd	Ga dBi	F/B dB	Elev.	Ground	Add H.	Polar.
1	51.0	44.91	-8.103	1.22	---	5.41	-7.37	90.0	Real	7.4	hori.

Current frequency

Start Optimization Optimization log Plots Wire edit Element edit

As it can be seen the VSWR is useable at 1:1.22 and proves that the tool for element dimensions produced values are in the right area but needed optimising The following radiation patterns were produced. These were generated assuming I had my antenna 7.4m above the ground (my /p antenna mast height) and sandy soil.



Building a Moxon Antenna - Paul (G7EWY)

After creating a VSWR vs Frequency graph the lowest point of the VSWR was above the center frequency of the band so I recalculated for a slightly lower frequency of 50.2 MHz. The changes were needed to compensate for the impedance of the soil and the height above the ground effecting the antenna tuning with capacitance.

Moxon Rectangle Generator

Frequency: MHz Wire size: mm

Format
☐ EZNEC
☒ NEC

Polarization
☒ Horizontal
☐ Vertical

Main lobe
☒ On X axis
☐ On Y axis

Results Units
☐ Feet
☐ Inches
☒ Meters
☐ Millimeters

Diagram labels: A, B, C, D, E, Feedpoint, Driven Element, Reflector.

Calculated dimensions (m):
A: 2.1436
B: 0.2791
C: 0.1049
D: 0.4132
E: 0.7972

The final modeling was to test the antenna theory that thinner elements have a narrower bandwidth. Using a 1mm copper wire and centered at 51MHz, as the Capacitive effects would be less with the much reduced surface area, the MOXON calculations were re-run with the following dimensions produced.

Moxon Rectangle Generator *1mm Cu Wire at 51 MHz*

Frequency: MHz Wire size: mm

Format
☐ EZNEC
☒ NEC

Polarization
☒ Horizontal
☐ Vertical

Main lobe
☒ On X axis
☐ On Y axis

Results Units
☐ Feet
☐ Inches
☒ Meters
☐ Millimeters

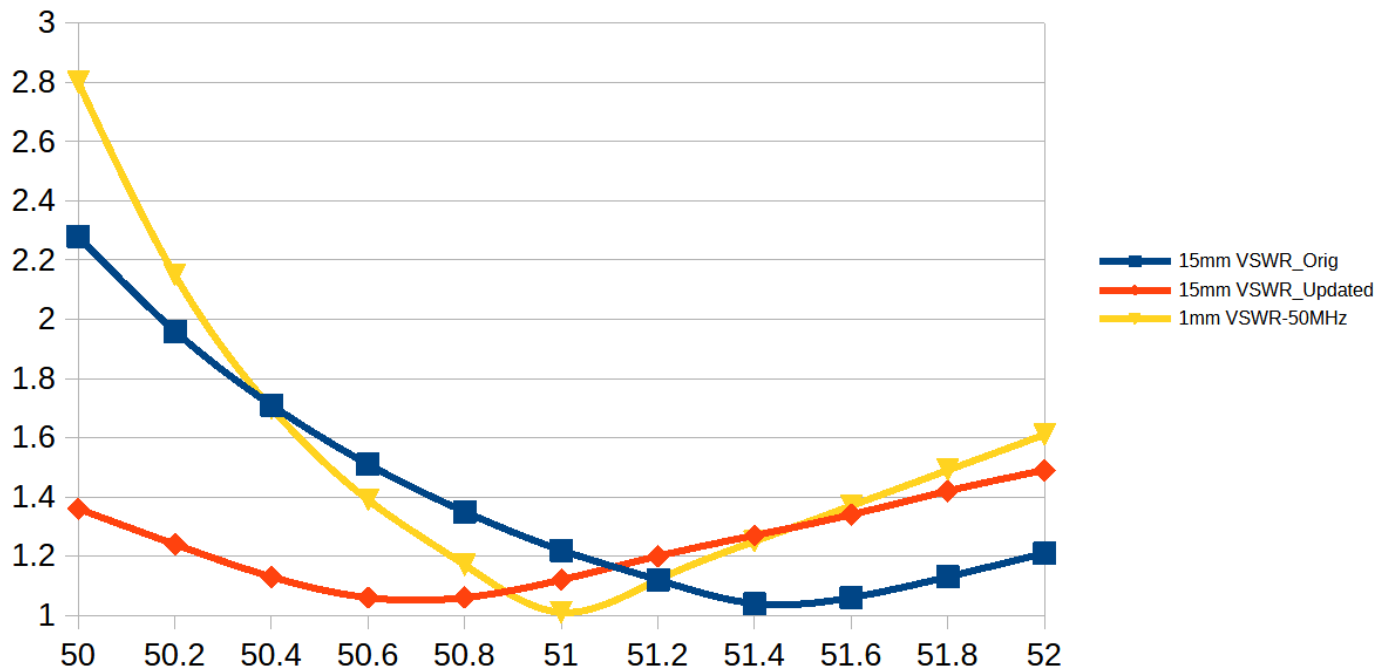
Diagram labels: A, B, C, D, E, Feedpoint, Driven Element, Reflector.

Calculated dimensions (m):
A: 2.1382
B: 0.3208
C: 0.0601
D: 0.3998
E: 0.7807

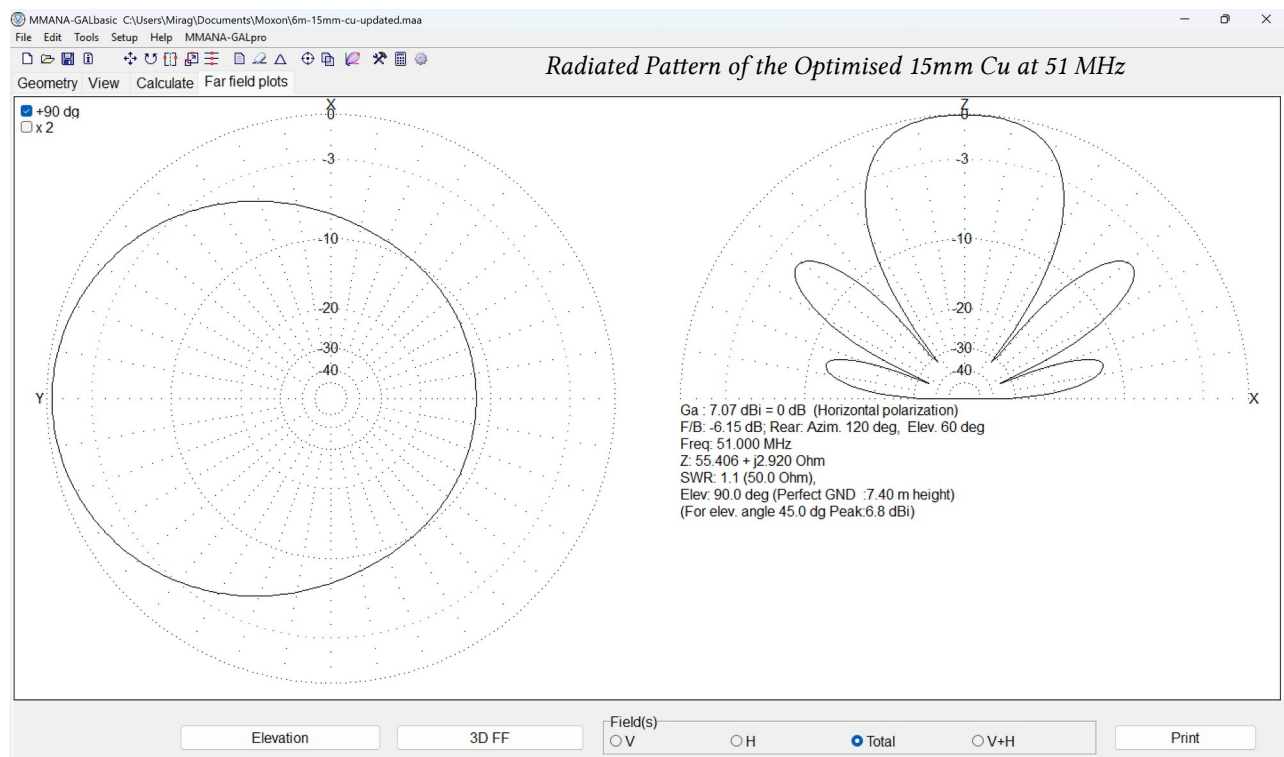
Building a Moxon Antenna - Paul (G7EWY)

Performing the same bandwidth modelling to produce the VSWR I produced a final plot showing the three VSWR plots.

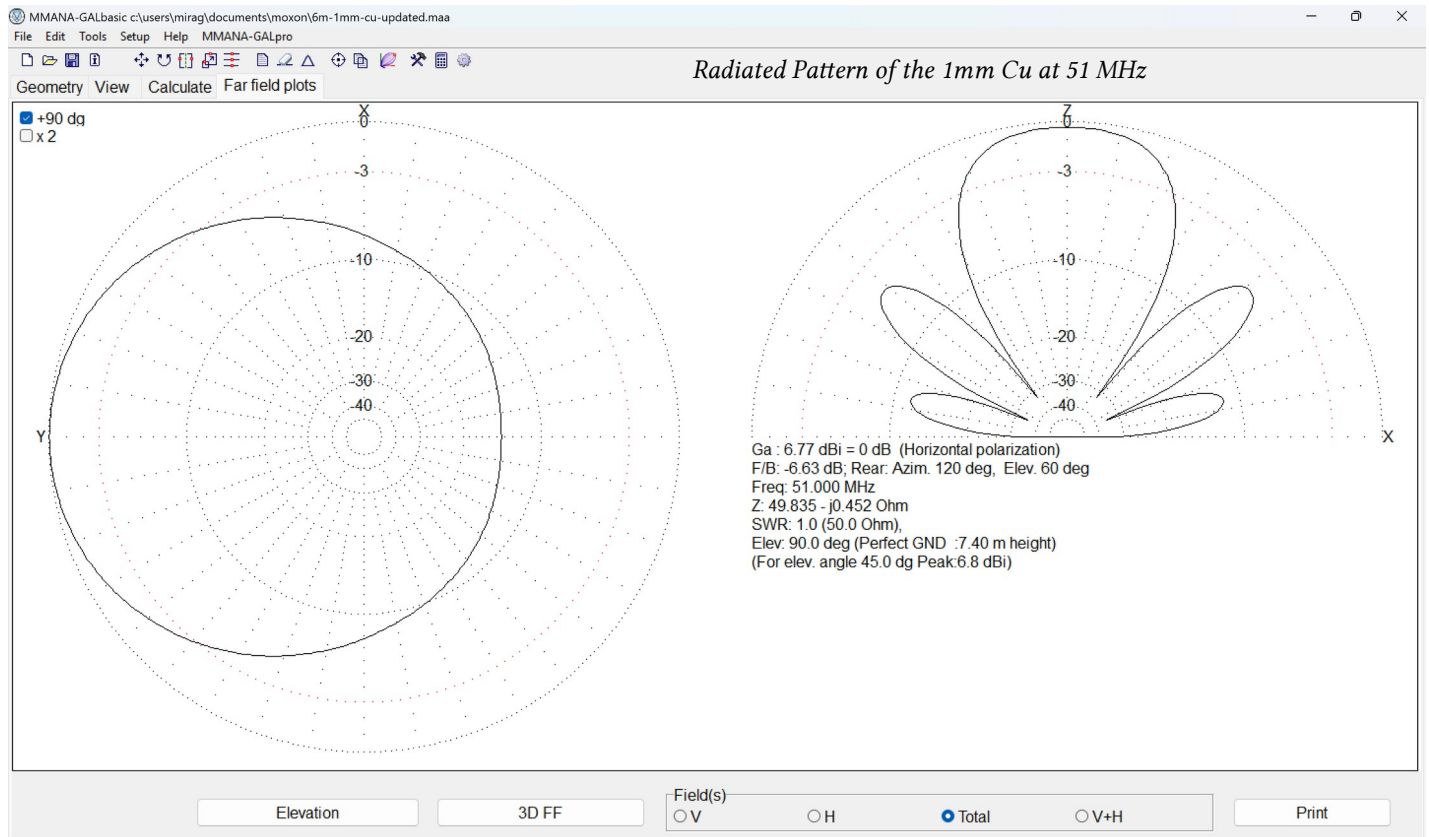
VSWR 6m MOXON



From the VSWR plots it can be seen that the larger 15mm diameter copper pipe does show a better bandwidth with respect to VSWR, however the 1mm wire has a higher Q factor. Using the optimum tuned 15mm dimensions and the 1mm wire the following two radiation patterns are produced with minimal differences between the two polars.



Building a Moxon Antenna - Paul (G7EWY)



The next step will be to see if I can actually build the antenna.

Unfortunately my antenna analyser is on the boat so maybe I can borrow one from another member nearer the time I actually build it. It should be noted that the dimensions given are centre lines of the elements should you be tempted to make your own! YouTube is your friend on building a Moxon!

73

Paul – G7EWY

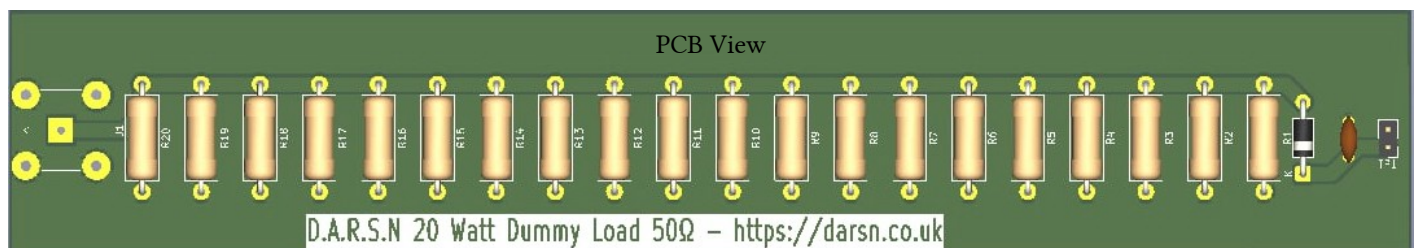
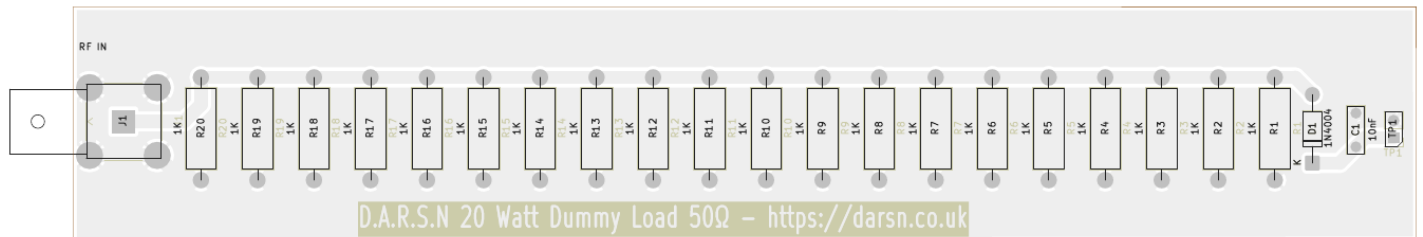
Thank you Paul for your informative article, it is great to see the more Technical details being tested and shown. Please keep us updated for a future newsletter. [Ed]

QRP Dummy Load – PCB - M9WWA

Last month (September 2026) I published a Schematic for the [QRP Dummy Load \(Page 7\)](#)

This Month, I thought I would lay out a PCB and offer it as a kit for a Winter Project Build.

I present here, the “MK1” Board and the Fabrication Screenshots. A 100 watt version will debut in November!



I do have some layout testing to complete so the overall design is subject to change but the Fundamentals do not change at all.

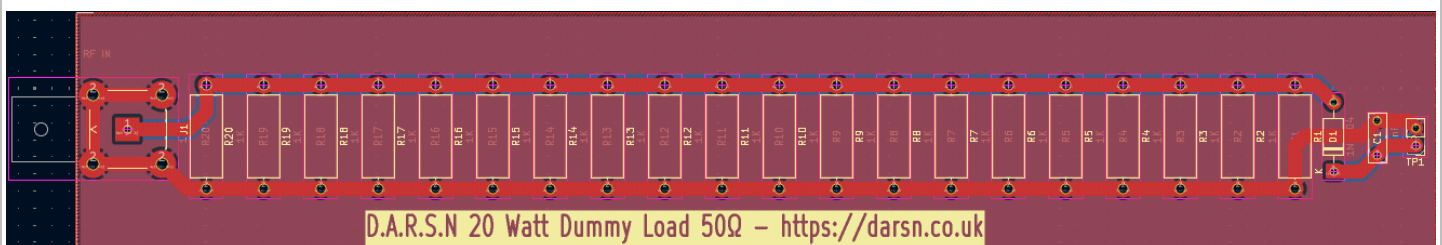
So what about the Diode, Capacitor and the Test Point?

Well that is a good question. These have been fitted so that a DC Voltage can be sampled from the Dummy Load and will give you a Voltage that is Proportional but not necessarily Linear in response.

The “MK2” will have a small Micro-controller attached that will read the voltage and use a look up table to determine the actual Wattage and place that on a small LCD Display or, if you want something a little more “Retro” looking, a moving coil display. I am currently trying to secure a sample of meters that could be of some use in the project but decent coil meters seem to be quite limited and expensive. I will keep you posted of course on what I find.

Other projects making their way to the Newsletter include a Digital Power Meter with VSWR Bridge display and if I get time, I will finish off the Echolink Bluetooth Controller board that I started some time back. I will also be re-visiting the SSTV / Digital modes interface and adding some much needed features.

One of the problems that I do face is that of finding appropriate cases for project use. Some ideas that I have given thought to over the last few years is to use single side copper board. I have even considered the use of Injection Molding but the cost of tooling is abhorrent. You can find all the information required, including the Gerber files on the [Wavewizards.org Website](https://wavewizards.org) and the “Mark2” 100 Watt version will also put in an appearance next month (November).



Are you wishing to build this? Check out the Interactive Bill of Materials list (BOM)

https://wavewizards.org/bom/dummy_load.html

Well, that's this end of the October Newsletter. I hope you have enjoyed this issue.

Coming November:

RF Sampler project – Build a -40dB RF Sampler

100 Watt Dummy Load – A High Power Version!

Join the [Facebook Group](#) to get the newsletter or view it online <https://www.darsn.co.uk>.

You can also download the latest issue at www.wavewizards.org/newsletter

As usual, a huge thanks to everyone who go out and participate in events and meet ups.
Special thanks go to Paul for his Moxon Antenna Article. Thanks Paul!

We will also have a Limited Edition Newsletter Book for DARSN members for Christmas.

Until next time, keep those finals warm. 73's Tim [M9WWA – Ed]

Make a Donation <https://pay.collectiv.com/dorset-amateur-radio-social-network-running-costs-33420>

Lots of merchandise available check out the Online Store for details, let me know if you would like anything.

Caps, t-shirts, key rings, sweatshirts, hoodies, chopping boards, pens, lanyards, note books, mugs etc

We are a not for profit club and all proceeds go towards keeping the club going.

Thank you for your support M9LIN



DARSN