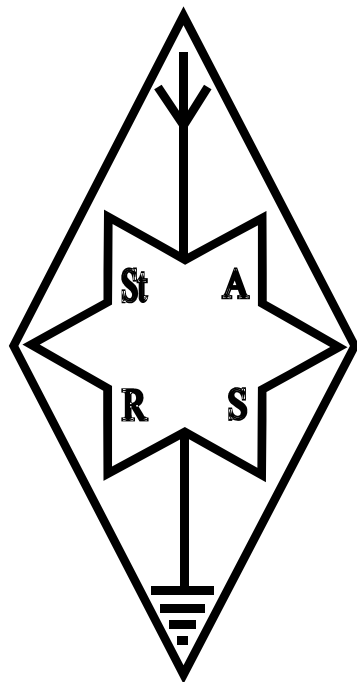


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G6OI
1938

The Newsletter for Members and Friends of
**Stourbridge and District
Amateur Radio Society**
incorporating
Old Swinford Hospital School Radio Club

G6SRS
1938



G4CVK

1969

ISSUE
07/2010



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Visitors always welcome

MEETINGS

The Society holds its full meetings on the

1st and 3rd Monday's of each Month at

Old Swinford Hospital School

Heath Lane

Stourbridge

(8.00pm – 10.00pm)

Additionally the shack is open during the same times on the intermediate Monday's

*All correspondence/enquiries should be addressed to the
Hon. Secretary:*

**John Clarke M1EJG
(01562) 700513**

honsec@g6oi.org.uk

STARS Web Site

WAP enabled ??

STARS

C/O The Mill House

21 Mill Lane

Blakedown

Kidderminster

DY10 3ND

www.g6oi.org.uk

www.g6oi.org.uk/wap/index.wml

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EDITORIAL

Following a considerable amount of activity by John Clarke and Alison Davey (from Oldswinford School H.R. Admin) we should have complied with the current legislation to enable the club to hold future Foundation Licence Courses following CRB checks on all affected members.

The annual Sheepwalks barbecue was a considerable success thanks to Richard Carroll and Nick Moss for preparing and keeping us continuously supplied with food and drink and also to Wayne Mcroft for the loan of his barbecue equipment. The warm and fine summer evening was complimented by the gentle baaing of the surrounding sheep and occasional talk of radio matters.

As usual contributions for the Starlite Newsletter are always welcome. Thanks go to Jim Kimpton for his news items passed on from his colleague from Australia.

Best 73's

Adrian (G0NLA) – Newsletter Editor – efitor@g6oi.org.uk

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Computer Aided Yagi Design using YAGICAD 5.2

Background

I came across YAGICAD by accident during 2009 whilst looking through the Internet for designs for direction finding Yagi for 2 Metres. In particular I was interested in a 3 element Yagi design by VK3VT see URL <http://www.vk3vt.net/VTbeam.html> .

The Yagi design and construction details were good, but the aerial was designed for the Australian 2 metre band plan and is optimised for 146 Mhz. Reading through the articles it became apparent that aerials had been designed by using a Computer Aided Design (CAD) package called YAGICAD 5.2. Going off at a tangent as one often does on the Internet I ended up on the YagiCAD home page www.yagicad.com .

YagiCAD 5.2 Features

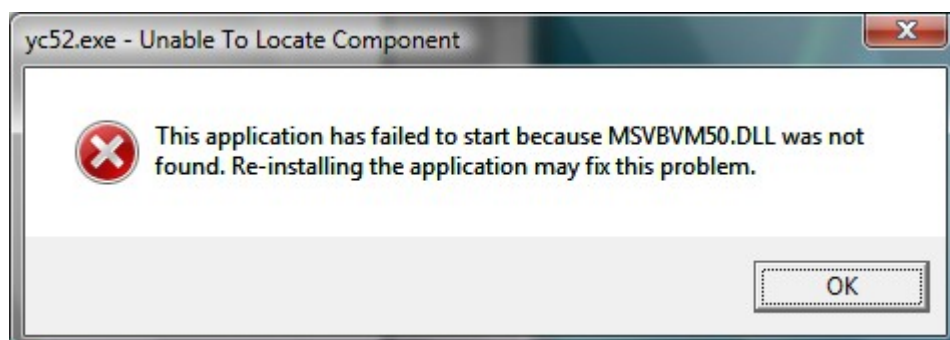
Even if you don't intend to design and build your own yagi try installing the program and having a "play". There are numerous samples provided with the program and it requires almost no instruction to use once one has understood the basics of the program. Of particular interest is the aerial radiation plots produced by the program. The program produces graphs showing expected SWR and matching impedance at various frequencies. Without cutting a single piece of metal the program lets one visualise how the finished item will perform and if the design is potentially viable. Altering element lengths and spacing is easy and the results can be viewed quickly. It is also possible to get YagiCAD to optimise your design for various factors such as maximum gain and front-to-back and more. So rather than just constructing an aerial to someone else's design by following an article one starts to understand why the element spacing and length were chosen and the process of Yagi design starts to become less of a "black art".

Program Installation

YagiCAD is easy to install by running the usual setup.exe program and there are versions of the program from pre and post Windows XP operating systems. Note however that the Visual Basic 5 Runtime is required. I installed VB5 Runtime in the directory in which YC52.exe runs.

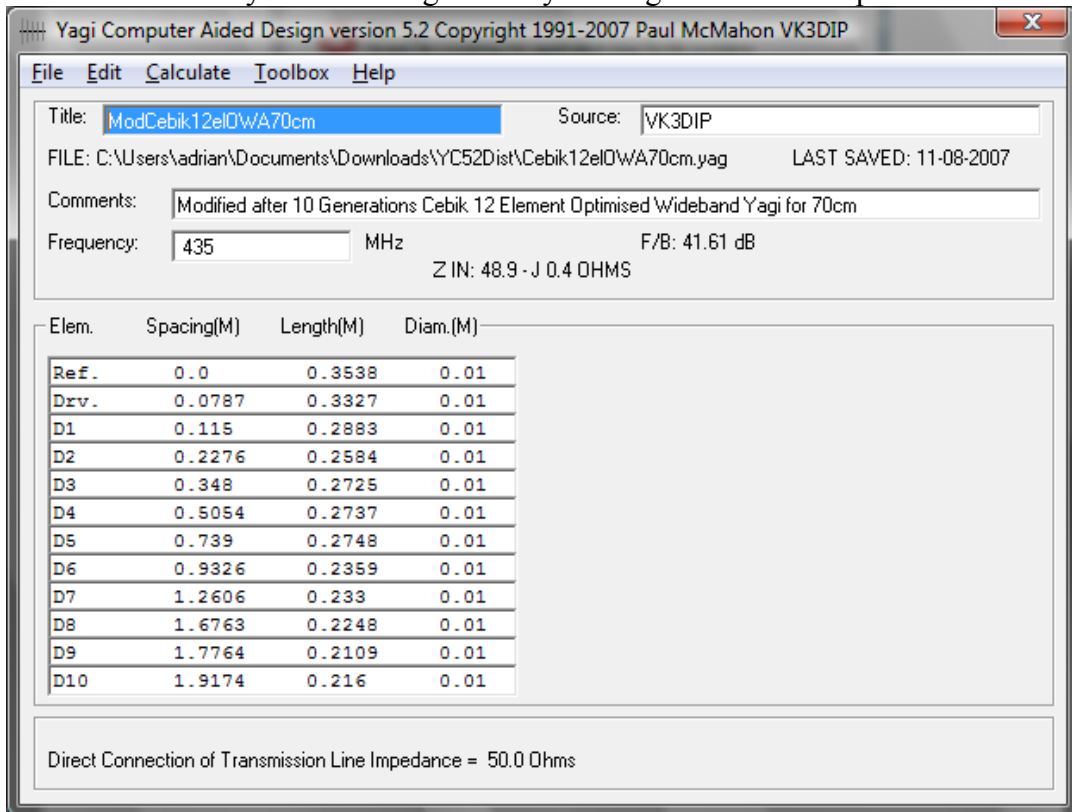
The required files can be downloaded from www.yagicad.com and the Visual Basic 5.0 Runtime Environment and can be downloaded from support.microsoft.com/gp/vbruntime

If you get a Dialog box like the one below then either you have not installed the the Visual Basic Runtime component correctly or it is not in the same directory as YagiCAD executable YC52.exe.



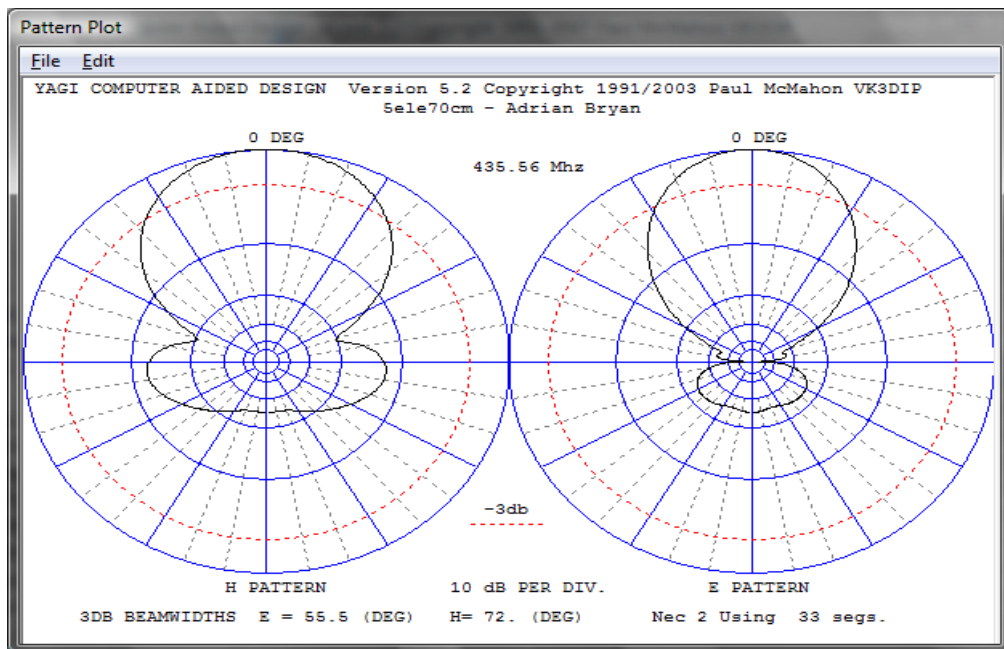
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When you have successfully installed YagiCAD try loading one of the sample files



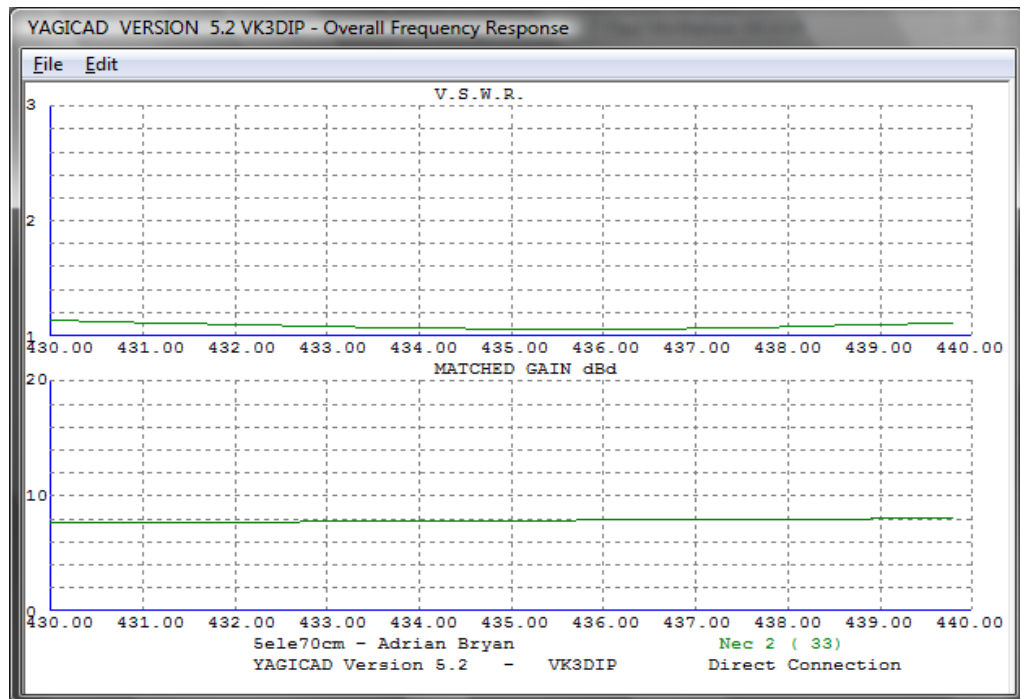
and you should see something similar to the above window. From this point just experiment with the facilities under

Calculate/Pattern for example



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Or - Calculate/Overall – accept suggested values



My Design Objectives

Rather than accept the VK3VT design I wanted a slightly modified aerial to meet my own objectives. The obvious first objective was to have an aerial that was optimised at say 145 Mhz rather than the original 146 Mhz. I also wanted to modify the radiation pattern such that the side lobes are less distinct. Where possible I wished to retain the compact size and matching arrangement of the existing VK3VT design so that the aerial fitted easily into my car and the SWR could be reduced close to one as possible.

See next month's Newsletter for details of the revised finished aerial.

Acknowledgements

I would like to thank VK3VT Greg Williams for his original DF aerial design and Fox Hunt beam web site and also VK3DIP Paul Mc Mahon for his splendid Yagi design software.

Any errors and misconceptions about Yagi design and construction and Direction Finding aerials are all mine – G0NLA – Adrian Bryan

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News from Australia

Check out the following links :-

Space Station Assembly

http://i.usatoday.net/tech/graphics/iss_timeline/flash.htm

Back to Morse Week

<http://www.abc.net.au/news/stories/2010/06/20/2931988.htm>

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YOUR COMMITTEE

Hon. President	NICK	G6DQN	
Vice President	JAMES	G7HEZ	
Hon. Secretary	JOHN	M1EJG	(01562) 700513
Hon. Treasurer	JOHN	G8UAE	
Committee Members	ADRIAN	G0NLA	
	MALCOLM	G8BOP	
	ANDREW	M6APJ	

CALENDAR of EVENTS

It should be noted that the Shack will be open every Monday evening unless shown otherwise in the Calendar

July	Mon 5th	Informal - On air or natter
	Mon 12th	Open Shack Night - On air or natter
	Mon 19th	Demo of Digital Slow Scan TV by Wayne (M5LLT)
	Mon 26th	Open Shack Night - On air or natter
August	Mon 2nd	Open Shack Night - On air or natter
	Mon 9th	Open Shack Night - On air or natter
	Mon 16th	Open Shack Night - On air or natter
	Mon 23rd	Open Shack Night - On air or natter
	Mon 30th	Bank Holiday
September	Sat 4th Sun 5th	S.S.B Field Day
September	Mon 6th	Informal - On air or natter
	Mon 13th	Open Shack Night - On air or natter
	Mon 20th	Main Meeting - Not yet arranged
	Mon 27th	Open Shack Night - On air or natter
October	Mon 4th	Informal - On air or natter
	Mon 11th	Open Shack Night - On air or natter
	Mon 18th	Main Meeting - Not yet arranged
	Mon 25th	Open Shack Night - On air or natter
November	Mon 1st	Informal - On air or natter
	Mon 8th	Open Shack Night - On air or natter
	Mon 15th	Surplus Sale
	Mon 22nd	Open Shack Night - On air or natter
	Mon 29th	Open Shack Night - On air or natter
December	Mon 6th	Informal - On air or natter
	Mon 13th	Open Shack Night - On air or natter
	Mon 20th	Main Meeting - Not yet arranged
	Mon 27th	No Meeting

