



# RAG CHEW

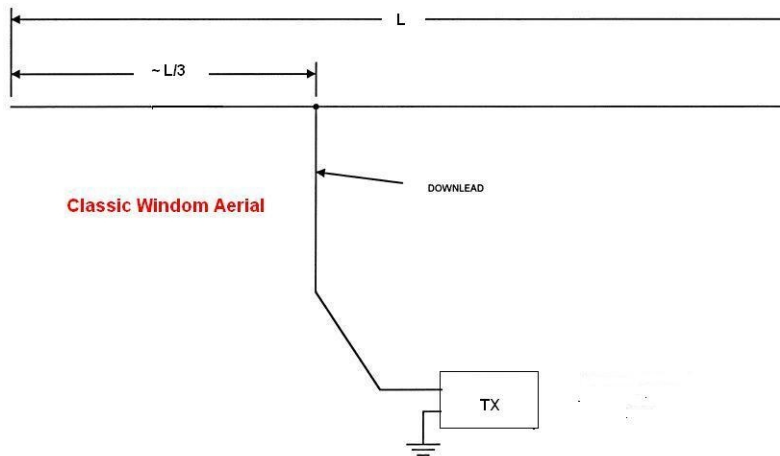
GLOUCESTER AMATEUR RADIO AND ELECTRONICS SOCIETY

No.7  
August 2012

Go to the GARES web site for all the latest news [www.g4aym.org.uk](http://www.g4aym.org.uk)  
This paper is formed of articles offered by you the members of the club:

## G2BI and his Aerial by Tom Morgan G3XMM

You may remember (probably not!) mention of a G2BI-type aerial in some previous articles about early National Field Days (NFD). At the time of writing I invited comments as to what it might have been. I was delighted therefore to hear from Cliff that it was some sort of Windom aerial and this inspired me to do a bit of research in various publications and on the Web. The first point to note is that the Windom of the 1930's was not quite the aerial that is often called A Windom today.



In the diagram the length  $L$  of the top section is a half-wave on the frequency of interest. A single-wire feeder, marked DOWNLEAD is tapped in at about a third of a wavelength from one end of the top section. In theory it is possible to adjust this tapping point so that there are no standing waves on the down lead and all the radiation takes place from the top section of the aerial.

As described above the aerial is a single band affair although later compromise designs enabled it to function reasonably well as a multiband aerial on the HF bands of the time. The field-day station at Painswick needed an aerial that would radiate effectively on two bands viz. 20 and 40 metres.

The G2BI solution was to fabricate A Windom for 20 metres and to adjust the length of the downlead so that the aerial could be matched on 40 metres also. The aerial would not function as A Windom on the lower frequency but would look more like a rather asymmetric "tee" with the downlead becoming part of the radiating system. It must have worked well enough since, as we have seen, the combination of the Gloucester and Bristol stations gained third place in the in the first experimental NFD..

So what about the man himself? An old call-book lists him as W.L. Palmer with an address in Calne. Wiltshire, it was part of RSGB Region 5, together with Herefordshire, Gloucestershire and Oxfordshire. So it is quite possible that his advice was sought when planning the regional stations.

Elsewhere in the literature he is mentioned as advocating and extending the use of the Windom. I have not been able to discover more than that, so if anyone knows any more about him I would be pleased to hear it.

## Club Program

August 6<sup>th</sup> - School Holiday. No meeting at the school.

August 13<sup>th</sup> - Out doors tonight at Saul Junction on this last but one Monday evening of the season. Bring those rigs and antennas also food for a picnic if you wish. This year it is going to be YL and XYL friendly (toilets available) so bring them along.

August 20<sup>th</sup> - A slide show 'An Amateur working in Antarctica 1977 thru 1982' by Andy Hawkins K4GKK, G4GKK, KI4EIO and VP8QI.

August 27<sup>th</sup> - Bank Holiday. Crickley Hill operating.

September 1<sup>st</sup> and 2<sup>nd</sup> - SSB Field Day Contest.

September 10<sup>th</sup> - AGM Night. Following the AGM there will be a short 'radio related' film which we hope you find entertaining. This will be the last meeting of the 2011/2012 season and we look forward to 2012/013.

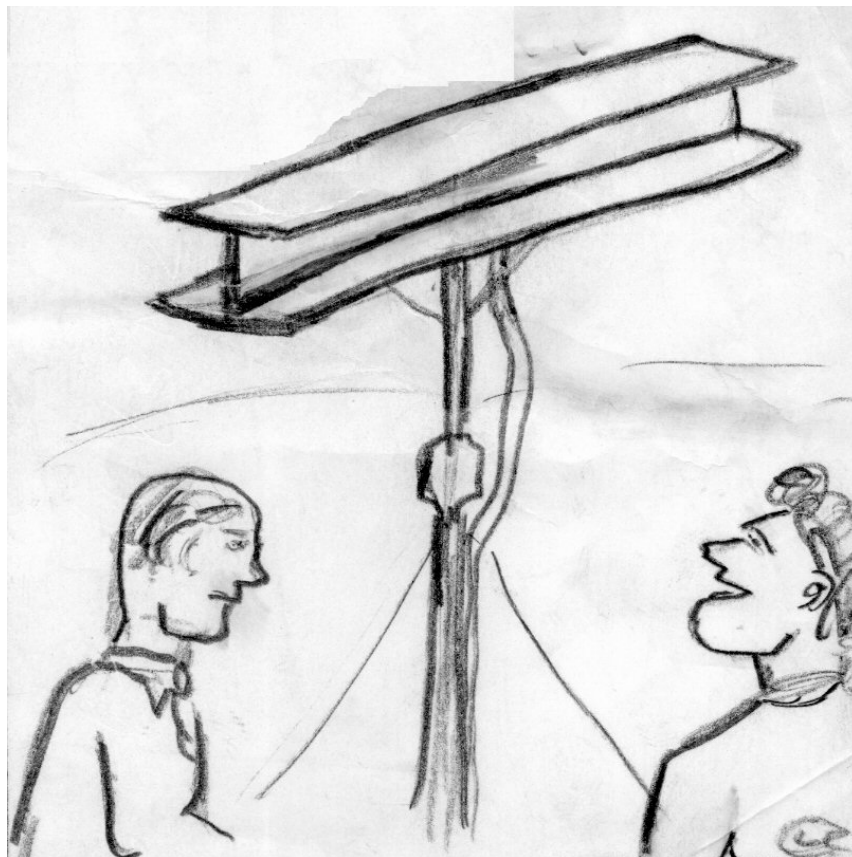
20<sup>th</sup> October 20<sup>th</sup> and 21<sup>st</sup> - JOTA event with the Wootton-Under-Edge Scouts. More details later.

November 10<sup>th</sup> - Club Calls Contest.

December 17<sup>th</sup> - Leta's Christmas Buffet. (To be confirmed).

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### Heard on the Air by Ian G4CLR



So that's the new beam!

## WATT'S IN A NAME

By Bernard Brown G-1889 I G3JFD

From Anne 2E1GKY

All the well-known units of measurement in electronics and electricity are named after some of the early experimenters, but do you know who the people were.

**AMPERE** Andre Marie Ampere (1775 - 1836) was born near Lyons, France. In 1801 he was appointed Professor of Physics and Chemistry at Bourg, and in 1804 he became Professor of Mathematics at Lyons. Moving to Paris that same year, he was elected to the chair of mathematics at the Polytechnic.

**COULOMB** Charles Augustin Coulomb (1736 - 1806), a French physicist, was born at Angouleme. As an army engineer he served in France and Martinique retiring at the outbreak of the French Revolution, but was later asked to advise on the new standards of weights and measures. In 1802 he was made Inspector of Public Instruction.

**FARADAY** Michael Faraday (1791 - 1867) was born at Newington Butts, Surrey. In 1812 he was taken by Sir Humphry Davy as his assistant at the Royal Institution. Faraday was Fullerian professor from 1833 to 1867 and scientific advisor to Trinity House from 1836 to 1865. In 1858 he was given a house at Hampton Court, where he died.

**HENRY** Joseph Henry (1797 - 1878) was born at Albany, New York State, USA. In 1826 he became Professor of Mathematics and natural philosophy at Albany, and in 1846 he became the First Secretary and Director of the Smithsonian Institute in Washington.

**HERTZ** Heinrich Hertz (1857 - 1894), a German physicist, was born in Hamburg. He trained as an engineer but studied physics in Berlin, and later spent two years as a lecturer at Kiel. Hertz was appointed professor of physics at Karlsruhe Technical College, moving to Bonn University in 1889.

**JOULE** James Prescott Joule (1818 - 1889) was born in Salford and his experimental skills appear to have been self taught. He was elected a Fellow of the Royal Society in 1850.

**OHM** Georg Simon Ohm (1787 - 1854) was a German physicist born in Erlangen. He became teacher of mathematics and physics at Cologne; Ohm's Law dates from 1827. He was appointed a Professor of Physics at Munich in 1849.

**VOLT** Alessandro Volta (1745 - 1827) was an Italian physicist born in Como. After holding the chairs of physics at Como and Pavia, in 1815 he was appointed as director of the philosophical faculty at the University of Padua.

**WATT** James Watt (1736 - 1819) was born in Greenock. Known mainly for his work in developing the steam engine, Watt was also an inventor in other fields. He retired in 1800 to Heathfield Hall, Birmingham and carried on inventing until his death.

**WEBER** Wilhelm Eduard Weber (1804 - 1891) was a German physicist who worked with Gauss, and together in 1833 they designed an electric telegraph.

Thank you to those who have contributed to this issue  
If you have an article to share Your ideas, information,  
projects, old stories, jokes or cartoons, trips, non radio interests or hobbies  
Just write it up with pictures if you have any  
e-mail it to me or give it to me on paper  
Brian M6BRI

[Brian.millard@virgin.net](mailto:Brian.millard@virgin.net)