Q5

Affiliated 1977

North Bristol Amateur Radio Club.

S.H.E.7, Braemar Crescent, Northville,Bristol.

MAY 2009

I have been on holiday I did take some gear, ic706 + the auto tuner a along wire + 80
Radial, a mobile whip for 2 and 70 the whip was fitted with radials.
I worked some of the locals direct and through the local repeaters. Did not work any DX on HF but worked stations on 80,40,20 and 15.
Went to the local radio club at Christchurch they made me welcome talked to various members, they have about 30 members, like our club not all members were there.
They have VHF, HF, TV. Digi. All runs similar to our club. Antennas .are wire HF and VHF beams on 80 ft tower crank up, there is also a smaller tower with the TV beams.

ANTENNAS.

THE GIBRALTAR SPECIAL. Captain G Smith. M.N. Retired. ZB2GS.

Figure 1 shows the dimensions for a 145MHz version. It consists of a full wavelength of wire which is fitted to a centre mast with spreaders so that it forms 4 diamond shapes. The wire is a continuous length witch starts at (a) then routed via (b, c, d, etc.) and is terminated at (I). At (b, d, f, etc) the wire fits into grooves cut in the ends of the spreaders, at (c, g,) it passes through suitable metal hooks. The spreaders are passed through holes drilled in the mast, one above the other, and glued into place (securing screws are necessary on larger versions ie; HF)
End (a) of the wire is connected to a termination block witch in turn is connected to a second block and then to the outer of the co-ax feeder. End (I) is connected to a 50 pf trimmer wired between the two terminal blocks and terminated on the inner of the co-ax feeder. The trimmer is for adjusting for lowest swr. The antenna is directional, maximum signal is from a point half way between (f and h). If mounted outdoors it should be made waterproof. The dimensions can be scaled up for other bands ie, HF. It is also possible to make a nest of antennas one inside the other, and excite them from the common co-ax feeder.
I have made one for 2 metres, using it indoors it was comparable to my colinear outdoors. The capacitor was made from a piece of co-ax trimmed for best swr. G8CKK.

Examples.

Measurements for 2 m (144MHz).
300/145MHz = 2.069m
Length of hypotenuse = 2.069/8 = 259mm
Spreader length = 2 x 183mm = 366mm

Measurements for 6m (51MHz).
300/51MHz = 5.88m
Length of hypotenuse = 5.88/8 = 735mm
Spreader length = 2 x 519mm = 1038mm

Measurements for 10m (28.5MHZ).
300/28.5MHz = 10.53m
Length of hypotenuse = 10.53/8 = 1316mm
Spreader length = 2 x 930mm = 1860mm

Measurements for 20m (14.2MHz).

300/14.2MHz = 21.127m
Length of hypotenuse = 21.127/8 = 2641mm
Spreader length = 2 x 1867 = 3734mm

To change mm to inches multiply by 25.4. eg: 3734 x 25.4 = 147”

Measurements For 4m (70MHz).
300/70.25 = 4.27m
Length of hypotenuse = 4.27/8 = 534mm.
Spreader length 2 x 378mm.

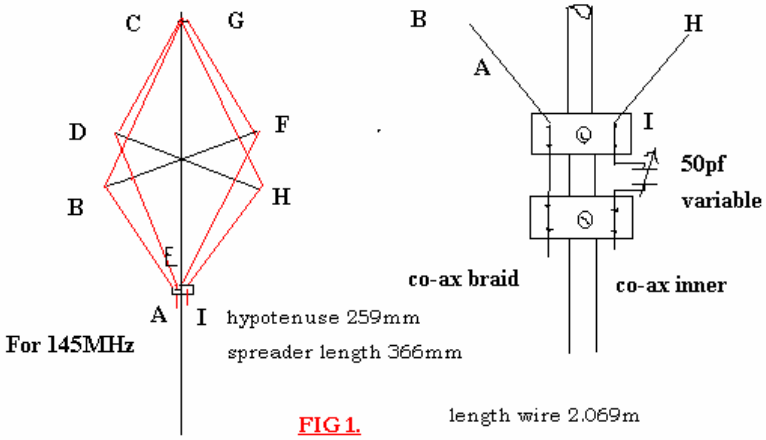
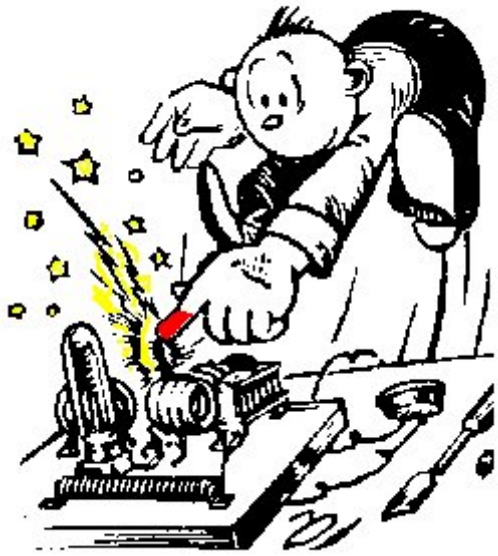


FIG 1.



WHAT NOT TO DO WHEN CHECKING FOR POWER.

RALLIES & EVENTS.

28th JUNE WEST OF ENGLAND RALLY.
“Cheese& Grain” Bridge St. Frome. Somerset BA11 1BE.
0/T 10.00-15.00. £2.