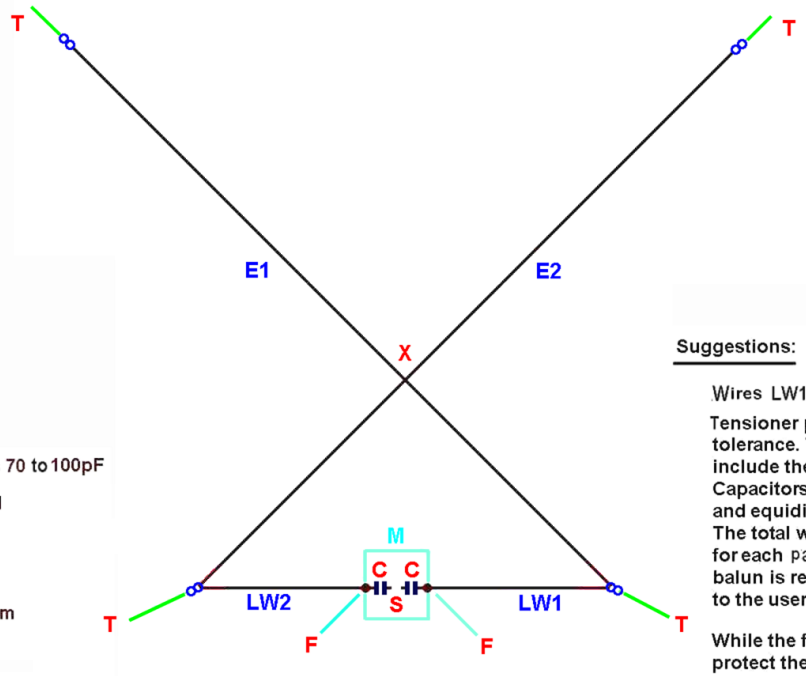

KEY

E1	10.770m	Element 1
E2	10.770m	Element 2
LW1	3.18m	Link wire 1
LW2	3.18m	Link wire 2
C	Pre-match capacitors 70 to 100pF	
S	50 ohm balanced feed	
T	Tensioner cord	
M	Matching Unit (C, S)	
X	Crossover gap 1 to 1.3m	
F	Fixed terminal points	

Suggestions:

Wires LW1 and LW2

Tensioner position range is +/- half a metre tolerance. The lengths for LW1 and LW2 include the wire within the matching unit. Capacitors C should be placed within 50cm, and equidistant from, the source connection. The total wire lengths E1+LW1 and E2+LW2 for each pair should be equal. The use of a balun is recommended, the choice being left to the user.

While the fixed terminal (anchor) points F protect the capacitors C from physical strain, they should be as close to the feed point S as possible.

Notes:

Values of C should be the same and adjusted for minimum SWR at the antenna.

Likewise, lengths of E1 and E2 may need (equal) adjustment (+/- 0.5 metre).

Recommended height of M and LW1, LW2 above ground = 2 metres (+/- 1 metre).

Antenna may be hung vertically or with its medial axis tilted. [In the diagram, towards or away from the reader].

Refs. SPRAT, Winter 2004 #121, Autumn 2005 #124; RadCom, Dec 2005.

SCHEMATIC: 40m G8ATH / G0SIB crossed monopole antenna for HF / NVIS

DJ Telfer 22 September 2007