The Copper J-Pole

$A = K(8857.5/(f\ Mhz)) =$ ____ INCHES

A' = Lamda/2 = 5905

B = Lamda/4 = 2952.5

A + B = 8857.5

$B = K(2952.5/(f\ Mhz)) =$ ____ INCHES

$C = K(265.2/(f\ Mhz)) =$ ____ INCHES
(gap distance)

$D = K(277.2/(f\ Mhz)) =$ * INCHES
(feed point) *Tuned best per dimension on chart

E = Approximately 20 Inches

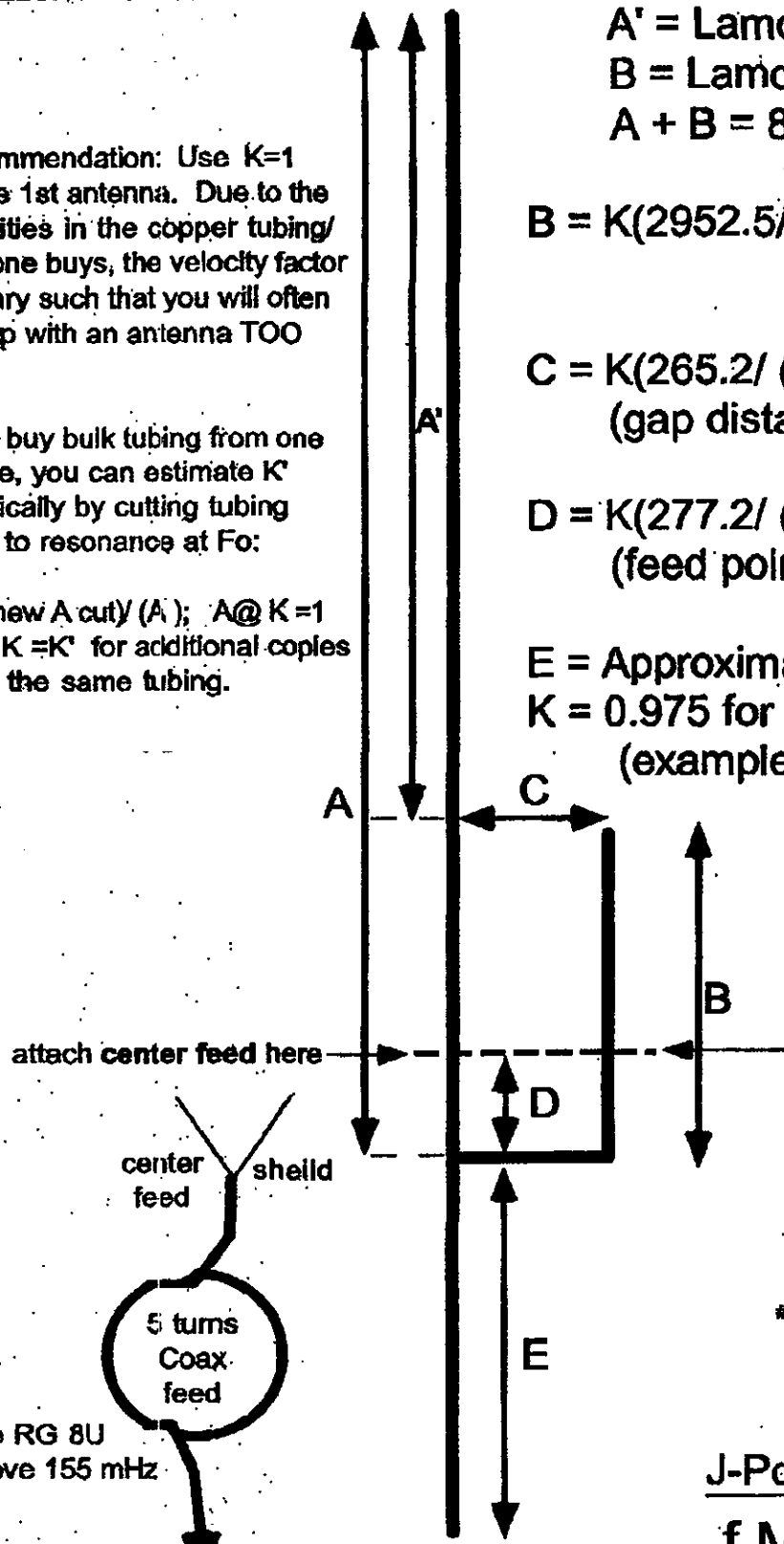
K = 0.975 for good quality Copper (RED)
(example)

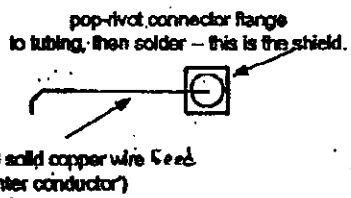
XMIT FREQ*	147.690	222.820
A	59.97"	39.98"
B	19.99"	13.25"
C	1.80"	1.19"
D	3.5"	2 7/8"

Recommendation: Use K=1 for the 1st antenna. Due to the impurities in the copper tubing/ wire one buys, the velocity factor will vary such that you will often end up with an antenna TOO short.

If you buy bulk tubing from one source, you can estimate K' empirically by cutting tubing down to resonance at Fo:

K' = (new A cut)/ (A); A@ K =1
Then K =K' for additional copies using the same tubing.





J-Pole Specifications

f Mhz = see table

Velocity Factor (K) = 1.0
(optional; K=1.0 otherwise)