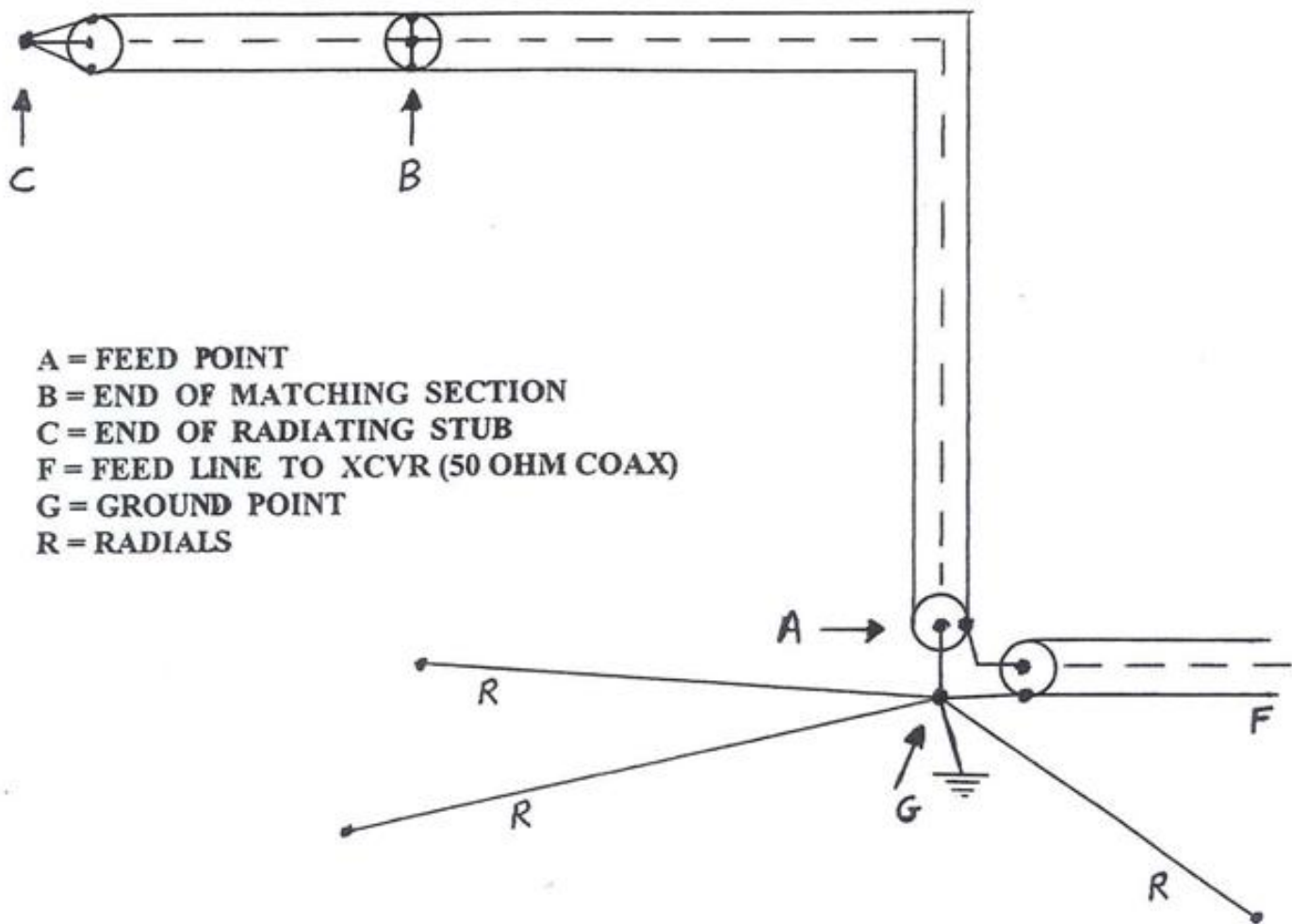


160M COAXIAL INVERTED "L" (BAZOOKA MATCH)



A = FEED POINT
B = END OF MATCHING SECTION
C = END OF RADIATING STUB
F = FEED LINE TO XCVR (50 OHM COAX)
G = GROUND POINT
R = RADIALS

FORMULAS (FOR 1.830 MHz):

$$\begin{aligned}
 ABC &= (460/1.830)(.5) = 125.68 \text{ Ft. (125 Ft. 8 In.)} \\
 AB &= (325/1.830)(.5) = 88.80 \text{ Ft. (88 Ft. 9.5 In.)} \\
 BC &= ABC - AB = 125.68 - 88.80 = 36.88 \text{ Ft. (36' 10.5")} \\
 R &= (242/1.830) = 132.24 \text{ Ft. (132 Ft. 3 In.)}
 \end{aligned}$$

NOTE 1 : MUST USE RG-58 WITH 66% VEL. FACTOR!!

SUGGESTION: USE STRANDED CONDUCTOR & POLY DIALECT.

NOTE 2 : AT "A", FEED LINE CENTER CONDUCTOR CONNECTS TO "SHIELD" OF ANTENNA & FEED LINE "SHIELD" CONNECTS TO GROUND AND CENTER CONDUCTOR OF ANTENNA!!

NOTE 3 : AT "G", A GOOD GROUND ROD IS HIGHLY ESSENTIAL.

NOTE 4 : RADIALS ARE NICE, BUT ANTENNA WORKS "OK" W/O THEM.

NOTE 5 : THE MORE VERTICAL LENGTH, THE BETTER, BUT MIN. IS 30 Ft.

*121 Ft
= 1.900*

*88.9.5
36
-2.4*

*20
124
-4*

NOTES ON 160 METERS

- A – Good Band at Night. Daylight propagation limited due to D-Layer absorption of RF.**
- B – With good antennas nationwide QSO's are easy at night as well as often into Europe and Carribean.**
- C – Gray-Line effect enhances long distance QSO's. Tipping of D-Layer allows entry/exit of RF along the "terminator".**
- D – Vertical antennas usually work best for longer DX due to low angle of radiation. Horizontal antennas being close to the ground send RF up instead of out.**
- E – However, vertical antennas are more susceptible to noise due to most noise being vertically polarized. Beverage antennas being close to the ground are quieter.**
- F – Most DX activity is between 1820-1840 on CW and 1840-1860 LSB. DX "Window" is 1830-1835.**
- G – Long QSB effect can help/hurt making contacts. CW often slower.**
- H – Good Band for short/medium range ragchews. Lots of room, especially above 1900 without the worry of QRM'ing DX, nets and "Private Frequencies". Lots of AM operation. No SW Bdcst'ers.**
- I – AM Broadcast birdies can be a problem on certain frequencies.**
- J – New territory for many Hams and can be challenging/fun/different.**

