ABSTRACT

Antennas are very important component in radio communications, both for having the character of broadcast, point to point, even for cellular. Functioning antennas as building transition which is commensurable of characteristic impedance between feed line to dialectical space/ free space.

In the beginning were knew Electric Dipole antenna, Monopole-Electric antenna, therewith another antennas which are complementary of them. Booker was experimented about the relation impedance of dipole antennas and the complementary and also with the characteristic impedance of the dialectical space. Brown-Woodward does the same thing but their experiment studied about dipole and the monopole once. By in consequence, Writer was make the demonstrator principles antennas are Babinet -Booker-Woodward's principle, with antennas are Electrical Cylindrical Monopole, Electrical Bow-tie Monopole, and the complementary once.

Measurement will focus in impedance, radiation pattern, polarization, VSWR, with frequency and wavelength will determine, so that will get some characteristic curve of tested antennas.

From The results of measurement are antennas have *omnidireksional* of radiation pattern, ellipse of polarization and the range of impedance 0.319 Ω - 99.26 Ω.