

Simple HF antennas

Antenna Tuner (Lier!) (Transmatch)

What they are good for, and not good for

Perfect antenna = 1/2 wave at 50 ohms?

Dummy Load

A random wire is better than no wire.

A resonant wire is better than a random wire.

So, what's a Resonant Wire?

1/2 wave (electrical, not physical), Multiple Odd 1/2 waves, 5/8th wave, loops

Magic Numbers: 300 (a.k.a. "c", a.k.a. 3×10^8 m/sec), 468, 985.5, Plus & Minus 5%

Why 300 <> 468?

To balun, or not to balun, that is the question!

Types of simple HF antennas:

Center fed 1/2 wave dipole

Inverted "V"

Everyone's favorite, the droopy dipole

Off center fed 1/2 wave dipole (1:4 balun)

Marconi

End Fed

Techniques to broadband/multi-band:

Fan

Jumpers

Traps

Bird Cage

Harmonics (60m-20m, 40m-15m)