Wire Arrays: 103 Models

The collection of wire models covers chiefly 1.8 MHz through 14 MHz, with a few models for the upper HF range. Models are in both the .EZ (EZNEC) format and in the .NEC format for use with NEC-Win Plus/Pro and generic NEC-2/-4 cores. The EZNEC-format models use a wide variety of dimensional units, but the .NEC-format models are virtually all metric. The filenames are roughly descriptive of the kind of antenna, the frequency band, and any features that discriminate between models of the same general kind and frequency. As well, models with a known designer identify the person in the filename.

The collection of wire arrays covers perhaps the widest territory of any of these collections, since there are collinear, end-fire, and broadside arrays. Hence, you will find extended double Zepps, 8JKs, and lazy-Hs among the offerings, along with many other variations on each of them. The collection also includes some wire Yagis apt for development in the low HF range. As well, you will find loops oriented both vertically and horizontally. Indeed, the collection is a mixture of antennas with predominantly horizontal and predominantly vertical radiation. For example, you will find rectangles, double rectangles, hentennas, half-squares, and bobtail curtains for the vertical radiation aficionado. Among the larger arrays are collinear extended double Zepps, Sterba curtains, and Bruce arrays. In addition, there are a number of wire loops potentially usable on several bands. The collection even includes a few long wires, Vee-beams, a rhombic, and some challenging NVIS arrays.

Virtually all of the antennas use either AWG #12 or AWG #14 copper wire as the main ingredient. As with any model in any collection, you may change the wire size and other dimensions to perfect a design more suitable to your circumstances. No collection can be complete in every aspect, but this set of wire arrays may provide a basis for your own development work.

Although many of the designs may be directly built from the models in this collection, the models themselves are for study purposes. Perfecting the design to a level that permits construction of an antenna that is both electrically and mechanically sound is your responsibility.

L. B. Cebik, W4RNL