Modified T2FD Antenna

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Credit Line: Radio- Dizain # 24, pp.: 78- 79.

The antenna is a variant of well- known T2FD antenna. This modified antenna have been working at my ham station for decade years and showed itself as low noise antenna that works from 1.8- MHz to 30- MHz, does not required ATU, easy to repeat, allows to receive weak DX- stations (especially on low HF- Bands), does not receive static interferences and has lots other advantages. **Figure 1** shows design of the antenna.

Antenna made of a copper wire in diameter of 2.5- mm (10- AWG), insulating spacers made of wood, stick has holes between antenna wires on distance of 87- cm and the stick has 1x1 cm cross- section. Load resistor should be non- inductive and bear at least 25 percent of power going to the antenna. Two wire line has length in 11- meters, made of a copper wire in diameter of 1- mm (18- AWG), distance between wires is 7.5- cm.

It was used home- made plastic spacers in the two wire line. Antenna was installed on a mast in 8- meters high. Matching transformer contains 16 turns, the transformer was winding on a flayback ferrite core from an old color CRT TV, four turns on each side (almost similar transformer is described at: http://www.antentop.org/008/ua3znw008.htm). Transformed was placed in a tin can, that was hermetically soldered.

Antenna was fed through a 75- Ohm coaxial cable. Antenna has SWR 1:1 to 1.4:1 at 1.8- MHz to 30- MHz. It was noticed that antenna does not produce almost any interferences with TV at working the antenna in transmitting mode.

73, de RK1AC

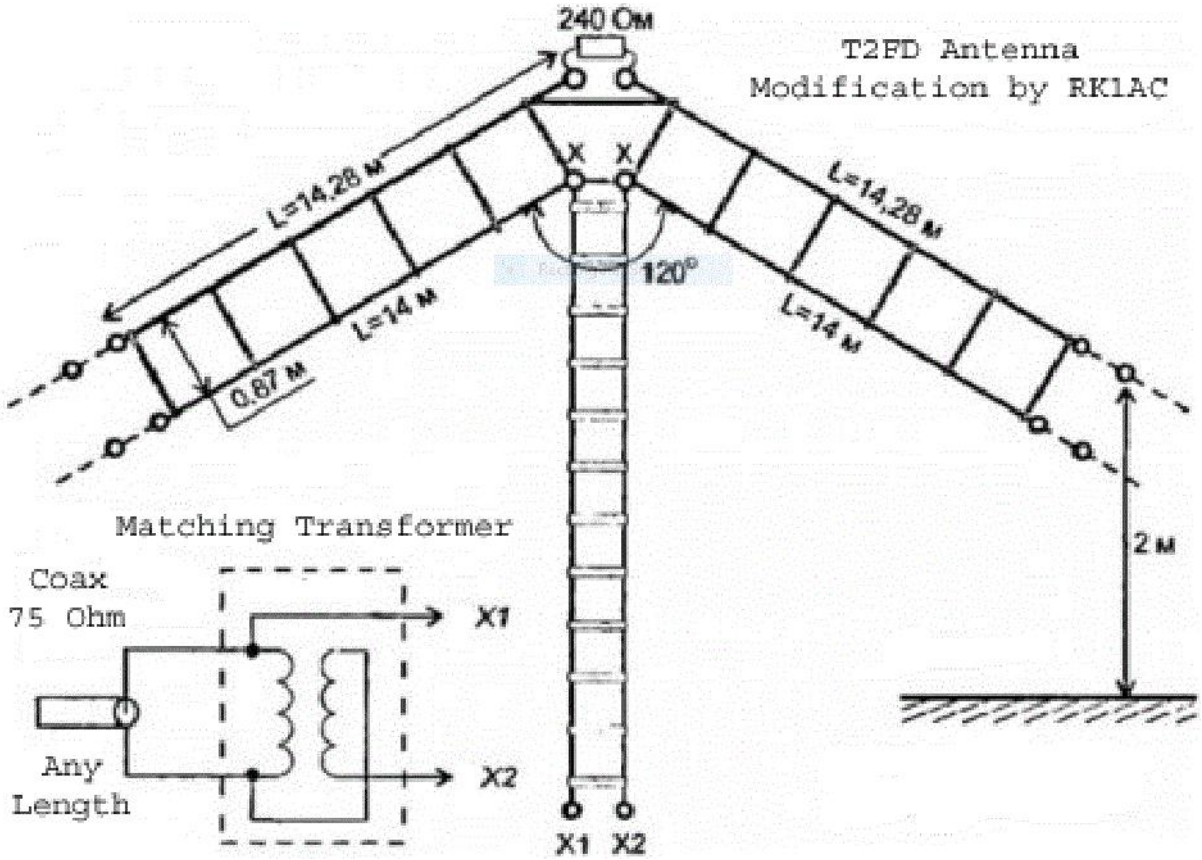

Figure 1 Design of the modified T2FD Antenna