145- MHz J-Antenna with no Mast RF- Current

The publication is devoted to the memory UR0GT.

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It would be very conveniently if a J- Antenna would be grounded to the metal mast. However there is a problem with an RF- current leaking from the J- Antenna along the mast. It is a very simple method

to block the current. Just a lambda/4 resonator should be installed straight under the J- Antenna. The resonator may be installed at the opposite side to the antenna or straight away under the antenna or may be installed two resonators, one from the opposite side of the antenna another under the antenna. Program MMANA helps us to investigate all of these implementations.

Figure 1 shows the J-Antenna with opposite choke resonator. **Figure 2** shows the current distribution in the system- J-Antenna with opposite choke resonator - Mast. **Figure 3** shows impedance the antenna. **Figure 4** shows SWR the antenna. **Figure 5** shows DD the antenna.

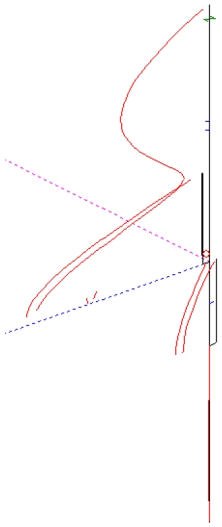

Figure 2 Current distributions in the system- J-Antenna with opposite choke resonator - Mast

The MMANA model of the 145- MHz J- Antenna with no- Mast RF Current may be loaded: http: // www.antentop.org/015/current_015.htm

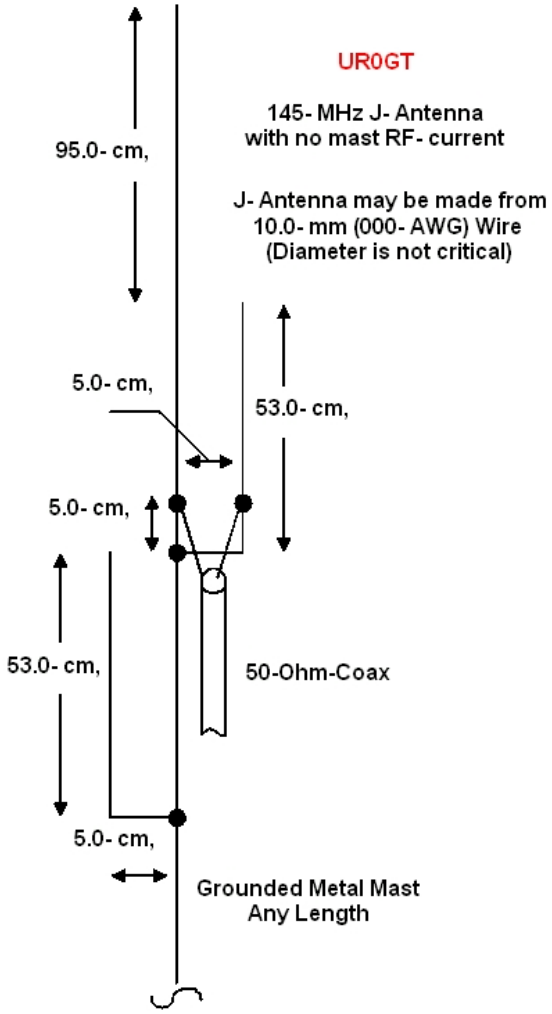

Figure 1 J-Antenna with opposite choke resonator

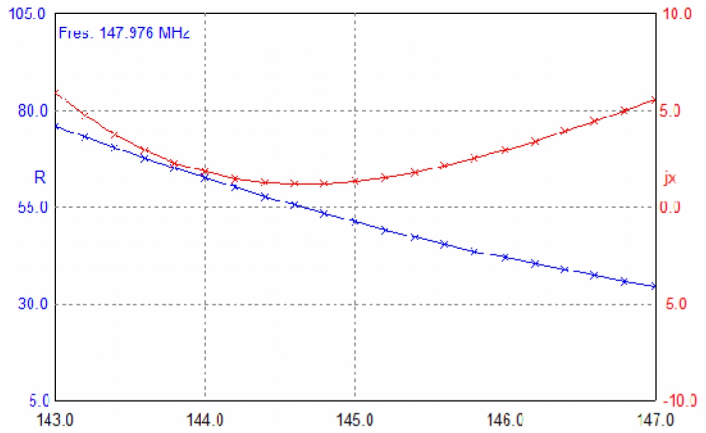

Figure 3 Z of the J-Antenna with opposite choke resonator - Mast

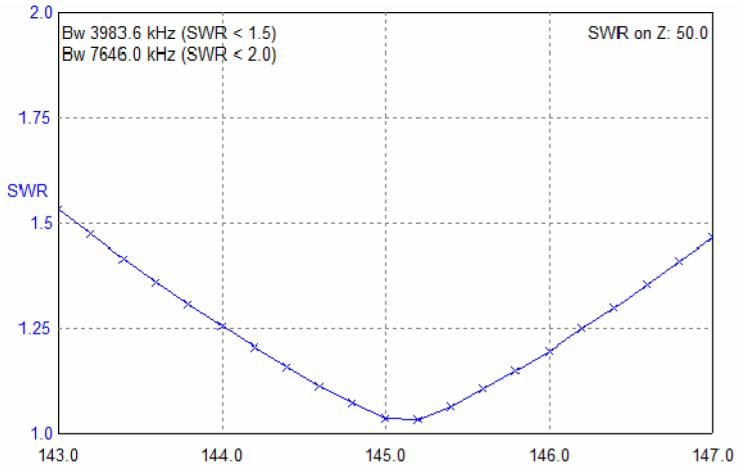

Figure 4 SWR of the J-Antenna with opposite choke resonator – Mast

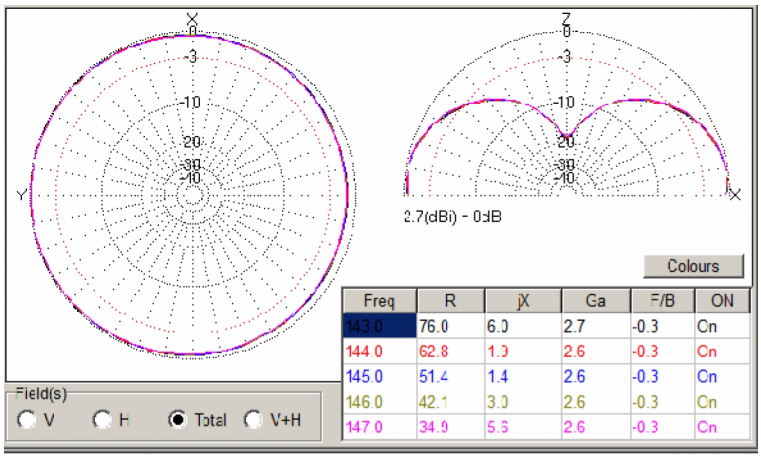

Figure 5 DD of the J-Antenna with opposite choke resonator - Mast

Figure 6 shows the J-Antenna with choke resonator straight away under the antenna resonator. **Figure 7** shows the current distribution in the system- "J-Antenna with choke resonator straight away under the antenna resonator - Mast."

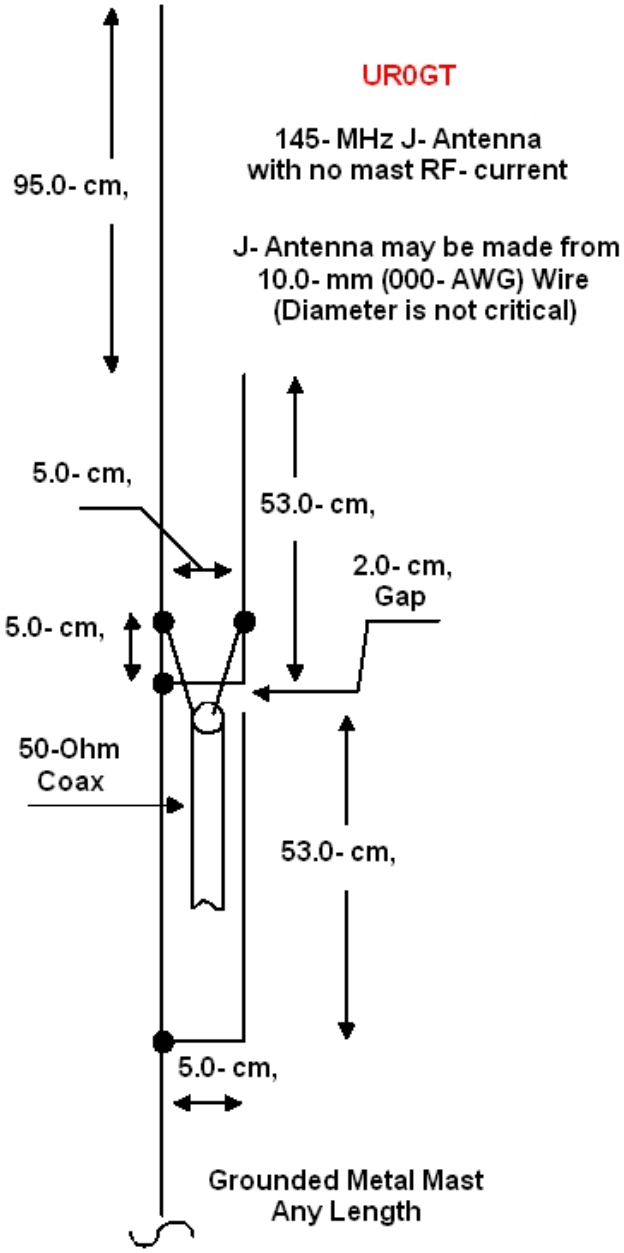

Figure 6 J-Antenna with choke resonator straight away under the antenna resonator

145- MHz J- Antenna with no- Mast RF Current

Figure 8 shows impedance the antenna. **Figure 9** shows SWR the antenna. **Figure 10** shows DD the antenna.

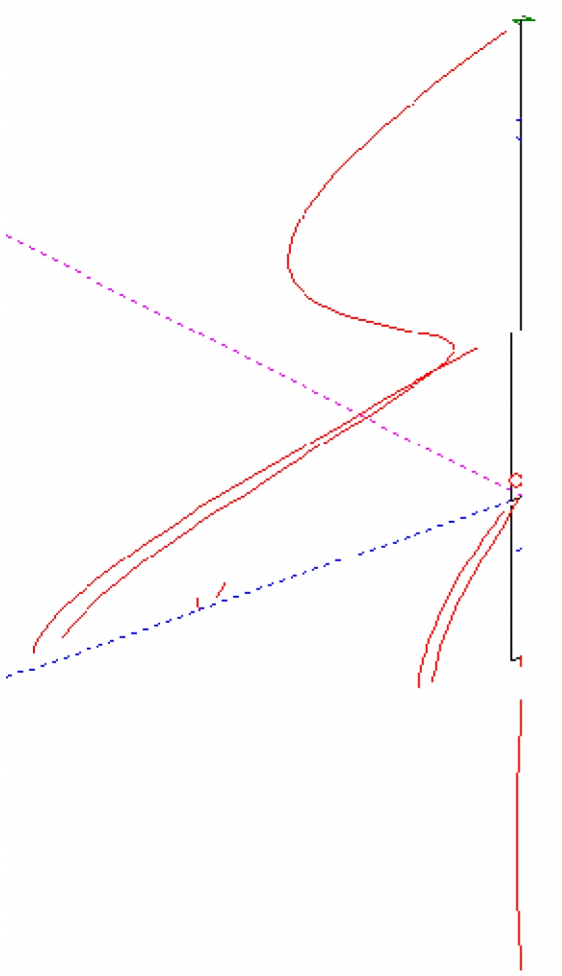

Figure 7 Current distributions in the system- J-Antenna with choke resonator straight away under the antenna resonator - Mast

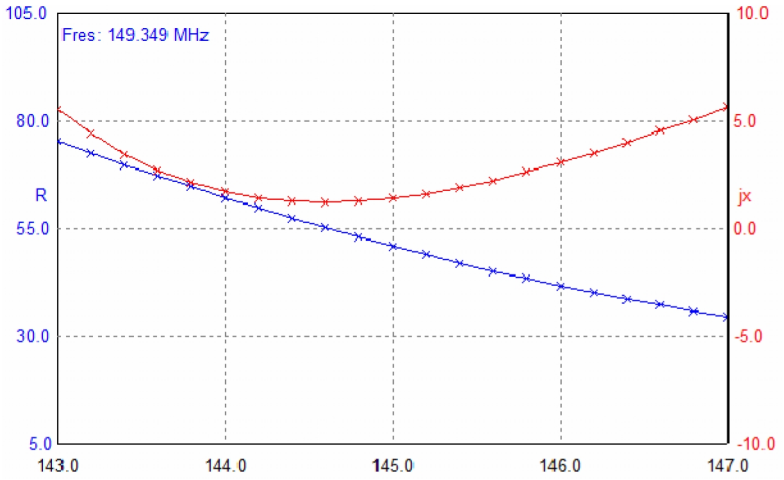

Figure 8 Z of the J-Antenna with choke resonator straight away under the antenna resonator

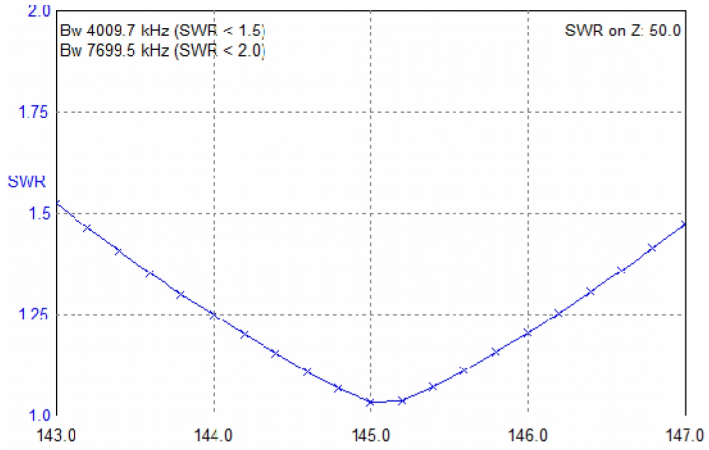

Figure 9 SWR of the J-Antenna with choke resonator straight away under the antenna resonator

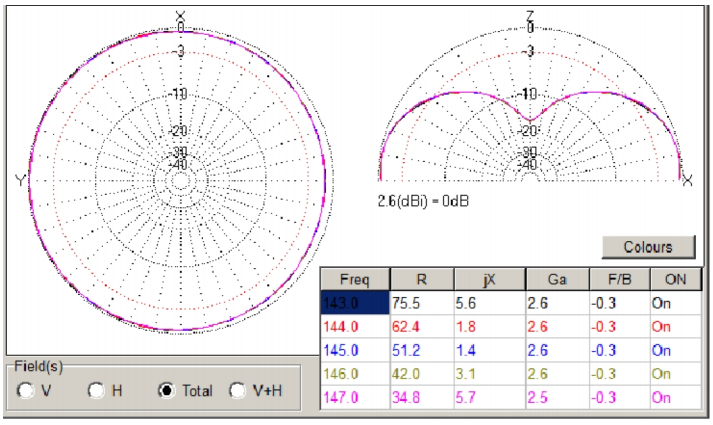

Figure 10 DD of the J-Antenna with choke resonator straight away under the antenna resonator

Figure 11 shows the J-Antenna with two choke resonators, one from the opposite side of the antenna another under the antenna. **Figure 12** shows the current distribution in the system- "J-Antenna with two choke resonators, one from the opposite side of the antenna another under the antenna - Mast." **Figure 13** shows impedance the antenna. **Figure 14** shows SWR the antenna. **Figure 15** shows DD the antenna.

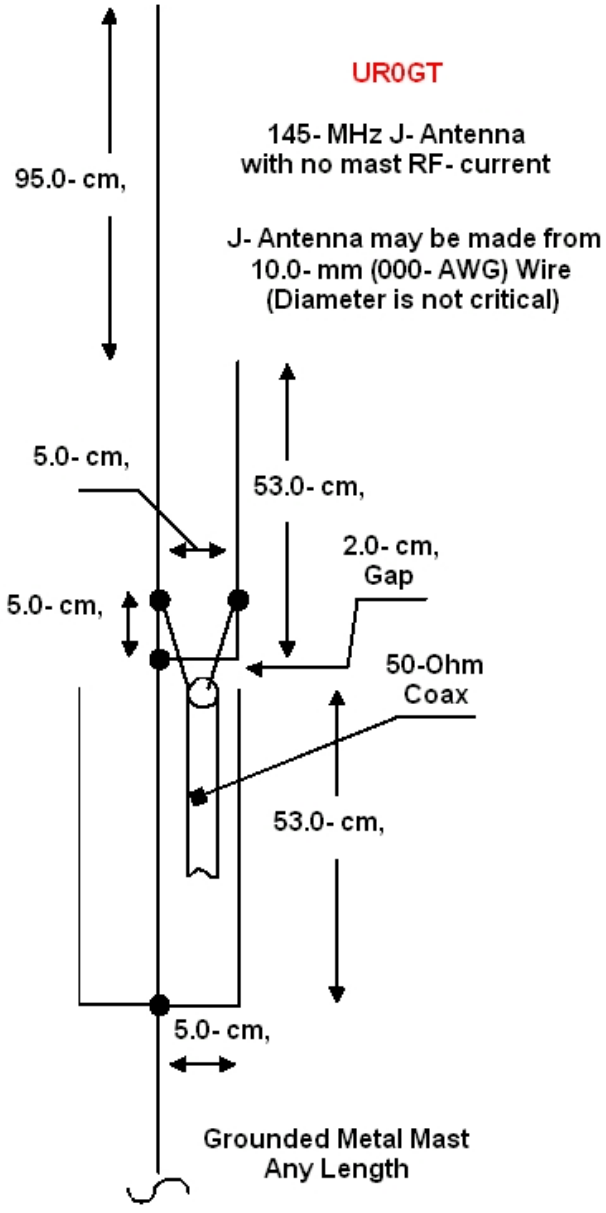

Figure 11 J-Antenna with an with two choke resonators, one from the opposite side of the antenna another under the antenna

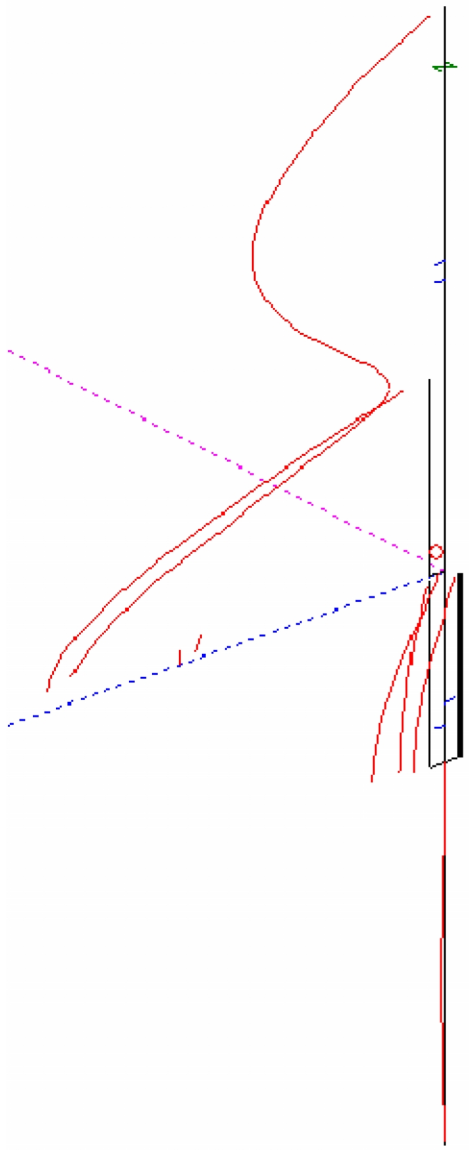

Figure 12 Current distributions in the system- J-Antenna with two choke resonators, one from the opposite side of the antenna another under the antenna - Mast

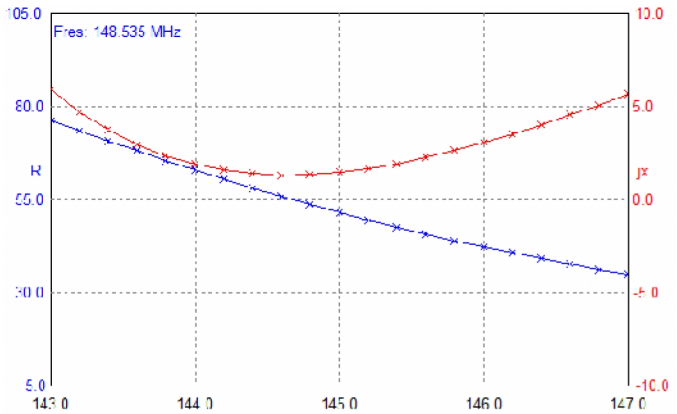

Figure 13 Z of the J-Antenna with two choke resonators, one from the opposite side of the antenna another under the antenna

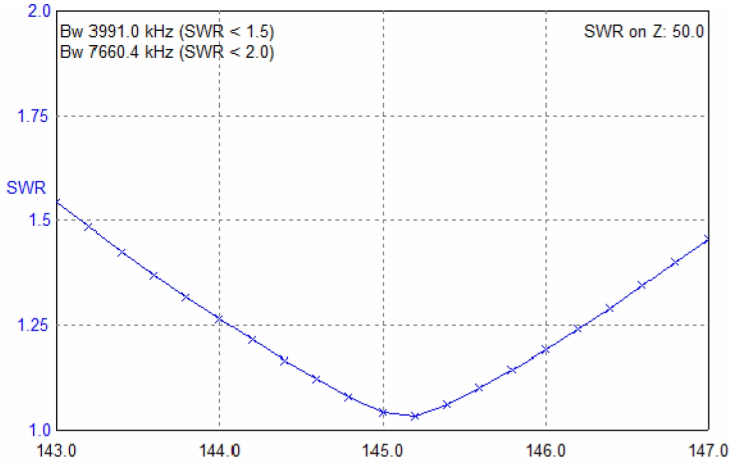

Figure 14 SWR of the J-Antenna with two choke resonators, one from the opposite side of the antenna another under the antenna

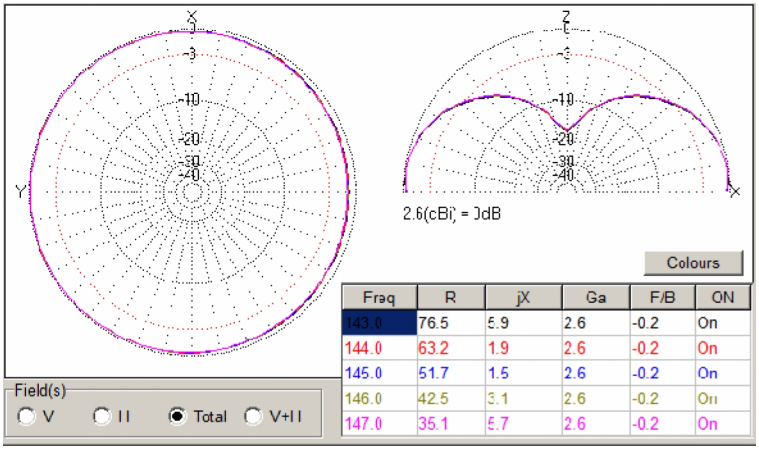

Figure 15 DD of the J-Antenna with two choke resonators, one from the opposite side of the antenna another under the antenna