

<u>The Double Zepp</u>	<u>The W3EDP</u>	<u>Longwire with MTFT</u>	<u>Feeding the Double Zepp with Baluns</u>	<u>Fan-Dipoles</u>	<u>Vertical-L</u>
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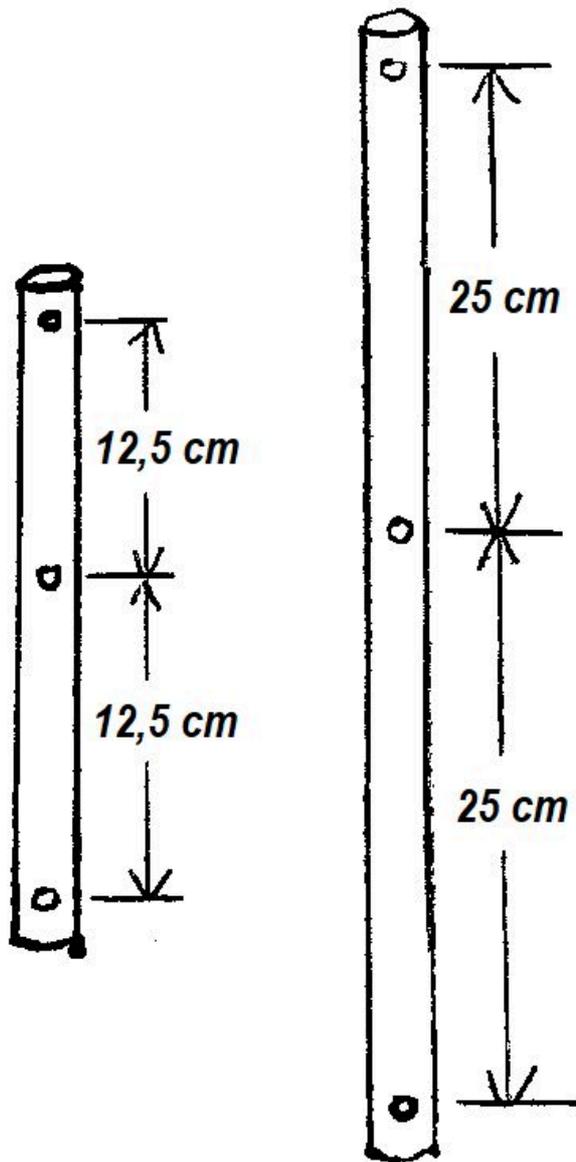
Fan-Dipoles for the Shortwave Bands (by DK7ZB)

After a lot of experiments with fan-dipoles here some proven examples for such antennas. Not all combinations are working properly. If the frequencies are too close together the impedances will lead to a very bad SWR. This happens with the bands 10-12-15m or 15-17-20m.

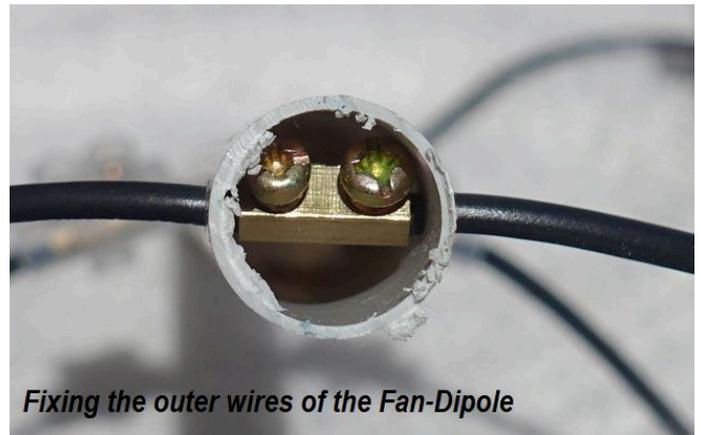
Optimal are the combinations 10-15-20m for the classic bands and 12-17-30m for the WARC-bands. The antennas are fed with current baluns and are performed with insulated wire for electrical installations with a 1,5 mm² stranded copper-wire.



The insulated copper braid



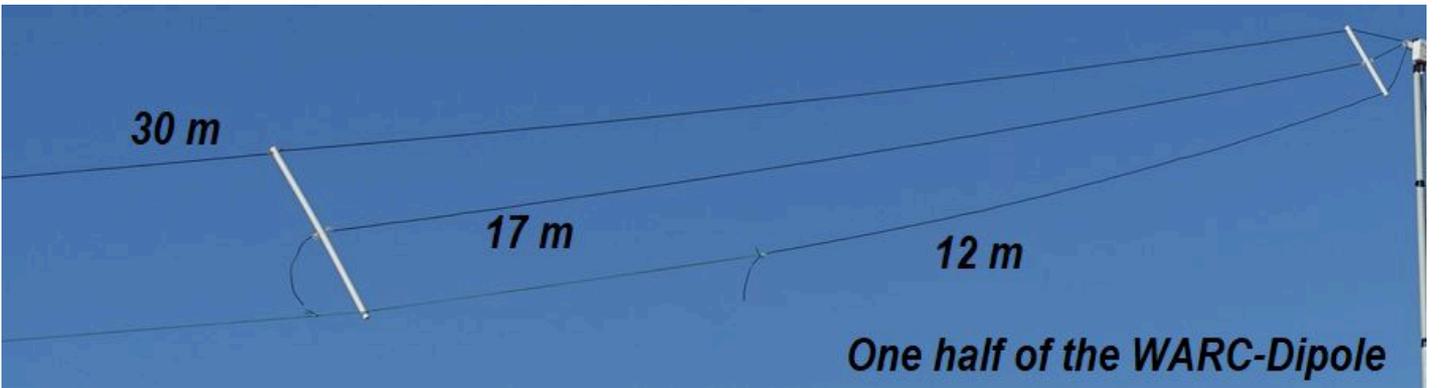
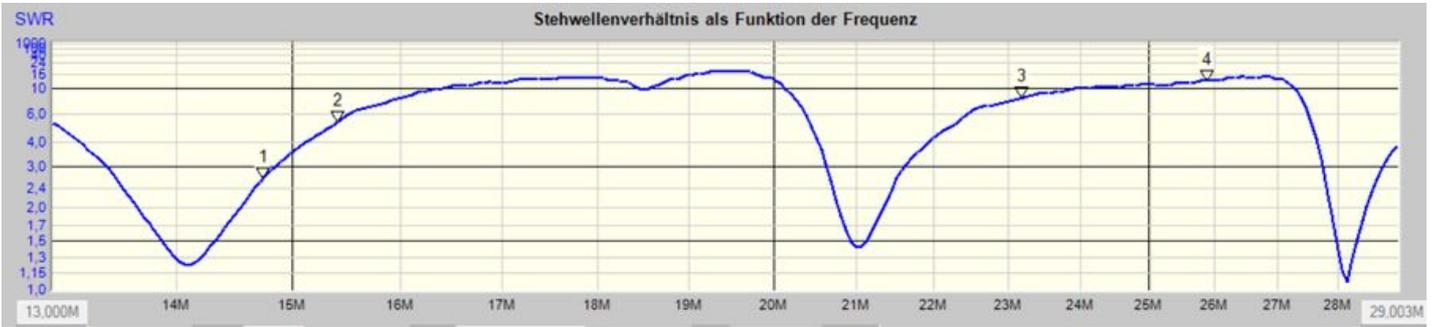
The spreaders for the fan-dipoles

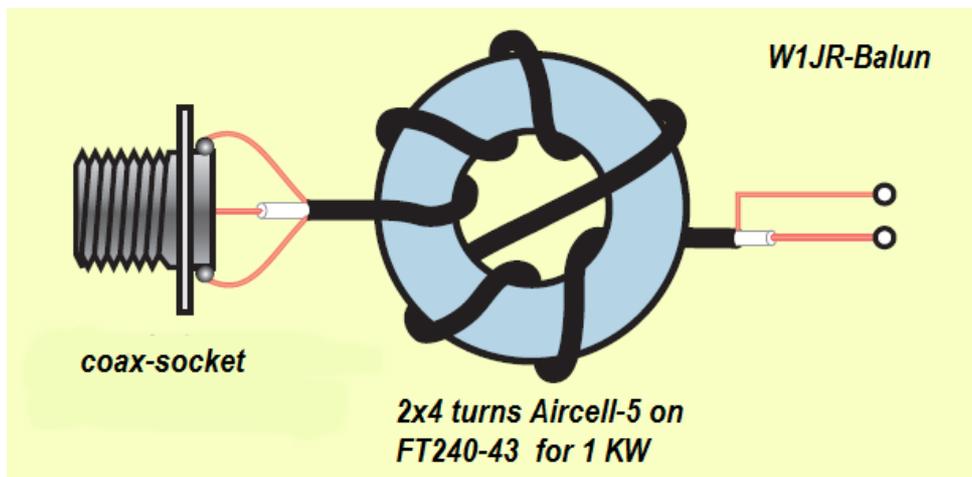
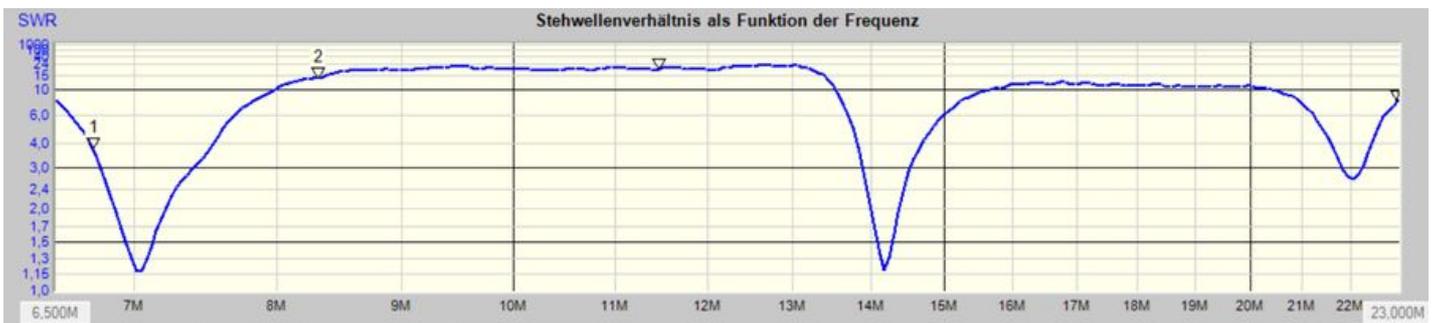
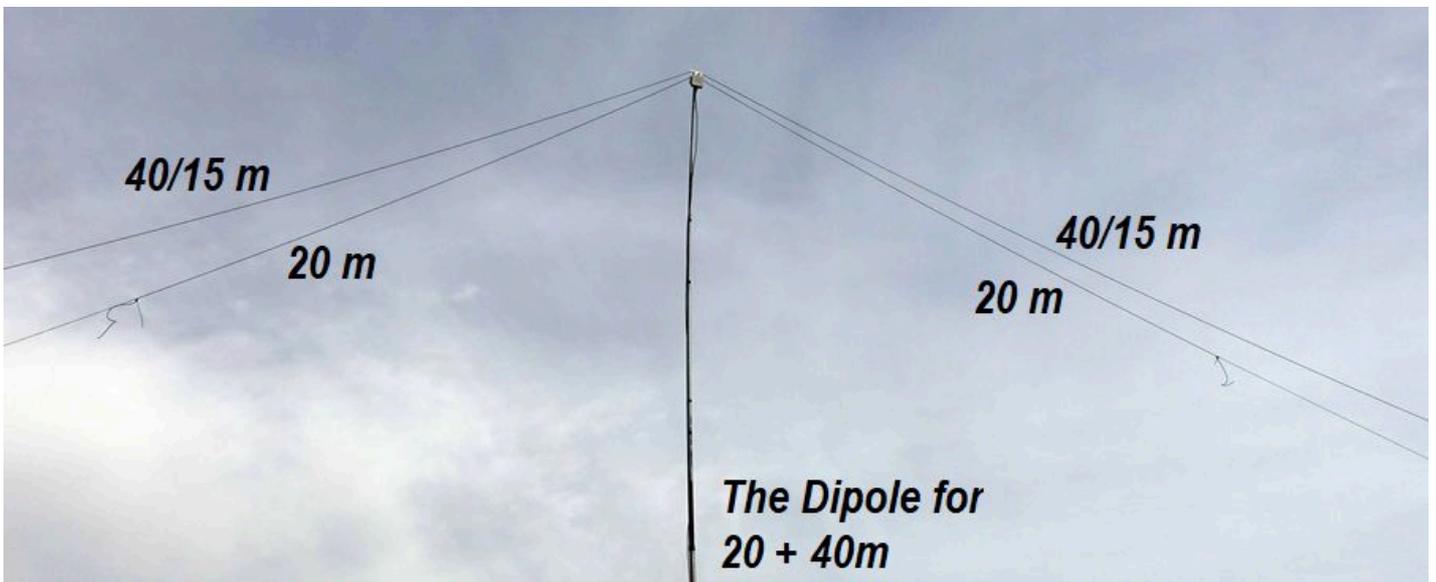


Fixing the outer wires of the Fan-Dipole



The 10+15+20m-Dipole at EA8/DK7ZB





The 1KW-Current Balun with a FT240-43 core and 2x4 turns Aircell-5



The 400-Watt Current Balun with a FT140-43 core and 2x5turns of PTFE-coax cable

Lengths for one half of the dipoles

20 m	498,5 cm
15 m	349 cm
10 m	259 cm

Lengths of the 10-15-20m-Dipole

30 m	680 cm
17 m	396 cm
12 m	296 cm

Lengths for the WARC-Dipole

20 m	525 cm
40 m	984 cm

Lengths for 20+40m

If the resonance of the frequencies are not correct, you can use the table for the correction per 100 KHz. With an ATU the 20+40m-dipole can be used on 15 m too, with good results.

Band	10 m	12 m	15 m	17m	20 m	30 m	40 m
Faktor	9 mm	12 mm	16 mm	22 mm	36 mm	70 mm	140 mm