

“EGGBEATER ANTENNA”

Particular use

ON6WG / F5VIF



~ “Eggbeater Antenna” used in mobile traffic ~

The “Eggbeater” antenna may be used on a vehicle as shown in the image above. In this case, this is the metal roof of the car which will act as the reflector. We can keep the distance of $1/8 \lambda$ between the antenna and the roof as described in previous articles. For land radio contacts we can slightly increase this distance, which has the effect of lowering the take off angle of the wave. In this configuration the antenna is still very effective in satellite traffic. The image above shows the VHF “Eggbeater” antenna used in mobile traffic through the International Space Station (ISS).



The image opposite shows the base mount of the antenna. The base used to place the antenna on the roof of the vehicle was recovered from a magnetic ski carrier for car. An adapter was fixed to it to receive the antenna.

Fig 1



Fig 2

The image opposite shows the switches used for reversing the polarization of the antennas. The “Eggbeater” antennas used by the F5VIF station include a coaxial relay which allows to reverse the polarization (see the article entitled “ Eggbeater Antenna VHF/UHF – Part 2 “). The two switches are of a different colour. They also include a light. The first one is connected to the VHF antenna and the second one is connected to the UHF antenna. The relays are supplied by the battery of the car. This system is also used for portable operation.

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Pictures : by the author ON6WG / F5VIF

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