

Antenna Exhibit VCC, TCC and ZUBTT- Part 1 (Non-Confidential)

The Part 1 of the exhibit comprises of different types of antenna and associated details.

- 1) Vehicle Coupling Coil (VCC)
- 2) Track Coupling Coil (TCC)
- 3) Zub Test Tracker (ZUBTT)

a. Antenna details:

Antenna consists of three coils:

1. 50 kHz Coil: A ferrite rod is located in the middle of the antenna housing, going (almost) from end to end in the “long” direction. The 50 kHz coil together with the 100 kHz coil, is wound around the ferrite rod. This detects the presence of track coupling coil.
2. 100 kHz Coil: The 100 kHz coil together with 50 kHz coil, is wound around the ferrite rod.
3. 850 kHz (frame antenna): It is located around/along the perimeter of the antenna housing. This is used to simulate the data transmission in the form of telegrams.

b. Statement: “All measurements were performed radiated and therefore antenna gain documentation is not required.”

c. Photos: The details are provided in Part 2 of the exhibit.

- a) Internal Photos-Antenna
- b) External Photos-Antenna