Electrical / mechanical specifications and sketch of Baby

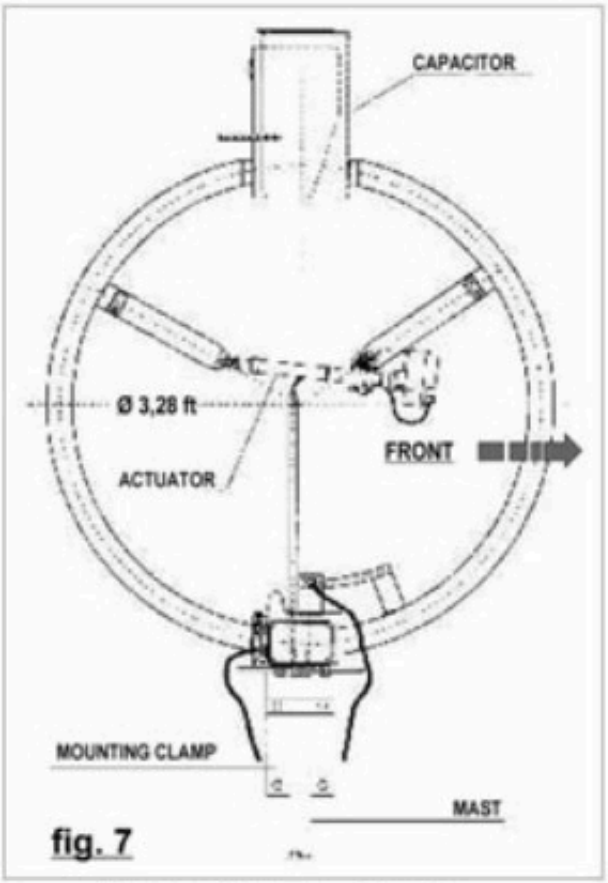

fig. 7

Electrical specifications

- Continuous frequency Range: 6.600 – 29.800 MHz
- S.W.R: 1.3:1 Typical
- Front to Back Ratio: 6 dB
- Front to Side Ratio: 25 dB
- 50 Ohm input impedence with gamma match short circuited (electrostatic discharge protection)
- Negligible noise and harmonics
- L = 3 µH Q = 1.100 at 7 MHz
- C = 400 pF at 17 KV r.m.s.
- Power Rating: 450W up to 21.0 MHz **
  1kW 22.0÷29.8 MHz **
- Bandwidth: 4 KHz @ 7.0 MHz
  6 KHz @ 14.0 MHz
  12 KHz @ 21.0 MHz
  20 KHz @ 28.0 MHz
- Gain compared to λ ½ dipole (1 "S" point = 6 dB):
  -4 dBd @ 7.0 MHz
  -0.3 dBd @ 28.0 MHz

**NOTE: With this LOOP ANTENNA the peak power is equal to the continuous power.

Mechanical specifications

- Antenna Diameter: 1 m (39.8 in)
- Aluminum alloy 60/60 welded with Tungsten and Injection of Gas
- Tubular Element Ø 50 mm x 2 mm thickness (1.9 in x .08 in)
- All stainless steel hardware and support pin
- Galvanized Mounting clamp for a mast of Ø 60 mm Ø 76 mm (2.4 in – 3.0 in)
- Net/Gross Weight 16 Kg / 26 Kg (26.5 lbs – 57.3 lbs)
- Windload 0.25 m^2 (2.7 ft^2)
- Maximum supported wind velocity 161 km/h (100 mph)
- Force exerted on antenna by wind of 129 km/h (80.15 mph)= 480 N
- Maximum flexibility moment on the antenna base anchoring point to a metal mast Ø 6 cm, height 3 m (Ø 2.36 in, height 9.84 ft) = 720 N/m

NOTE: *C.E.I. regulations require the installation of a wind-guys for areas of high wind with possible iceformation. (in this case NON metallic guys)*

fig. 8 S.W.R. TEST