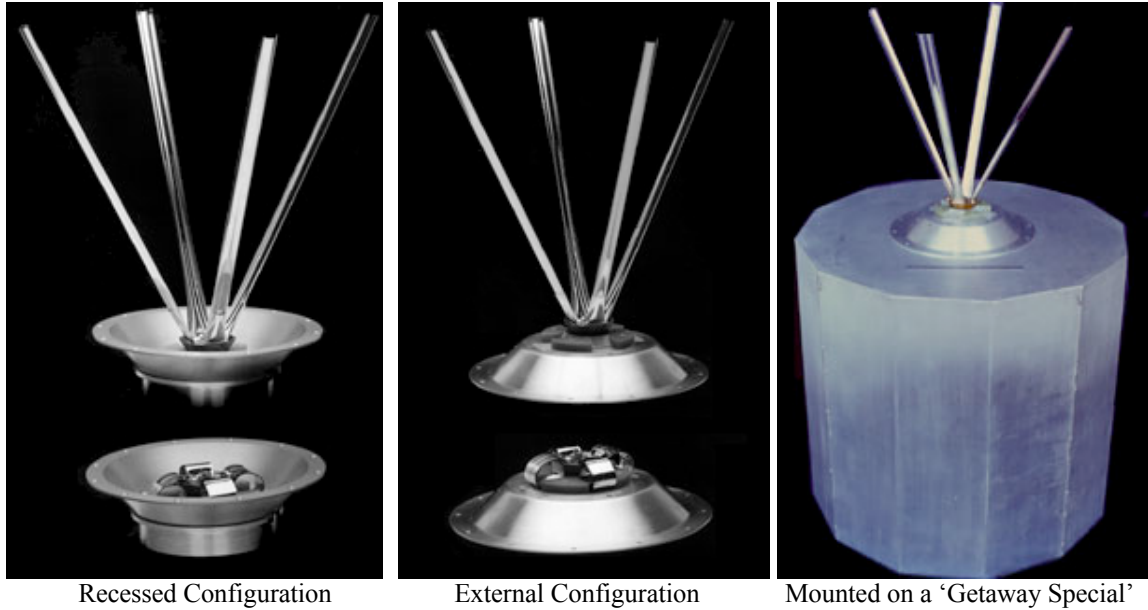


## Deployable Conical Monopole Antenna



The Deployable Conical Monopole Antenna (DCMA) was designed for use on an inexpensive small satellite. When used on either end of a "getaway special" canister, the antenna produces dipole-shaped patterns over a broad frequency range in the LF/MF bands. Performance is optimized over 225-400 MHz, but the antenna operates with reduced performance as low as 50 MHz and as high as 900 MHz.

The four deployable ribbons are made of heat-treated beryllium copper. When stowed, these are held in place by nylon line. The ribbons are deployed by applying power to a nichrome wire element which severs the nylon line. 1.85 amps at 28 volts over approximately 3 seconds is required for deployment. The total antenna weight is 1.2 pounds.

