27Mhz Whiplash Transmitter Circuit Description

Q5, crystal Y1, R13, R14, C16 and L6 produce a 27MHz common-emitter crystal oscillator. The RF oscillator delivers the 27MHz carrier power through the coupling capacitor C14 to the base of the modulated amplifier Q4. The intelligence signal created by the IC TX6C is added together with the carrier to form the modulated signal, which subsequently amplified by the buffer/modulated amplifier.

A filter and matching network consists of C6, C11, C18, L1, L3 and L4 suppresses the harmonics and allows maximum power of the 27MHz region coupled to the antenna with proper output impedance. The antenna is a 240mm long spring type steel wire. There is no external ground connection. The ground is on the circuit board only. Electric power of the transmitter is supplied by a 9 Volt primary storage cell.